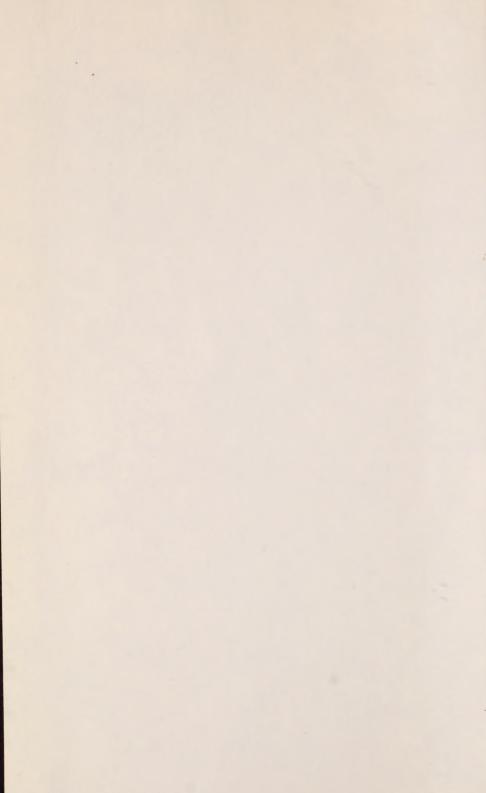




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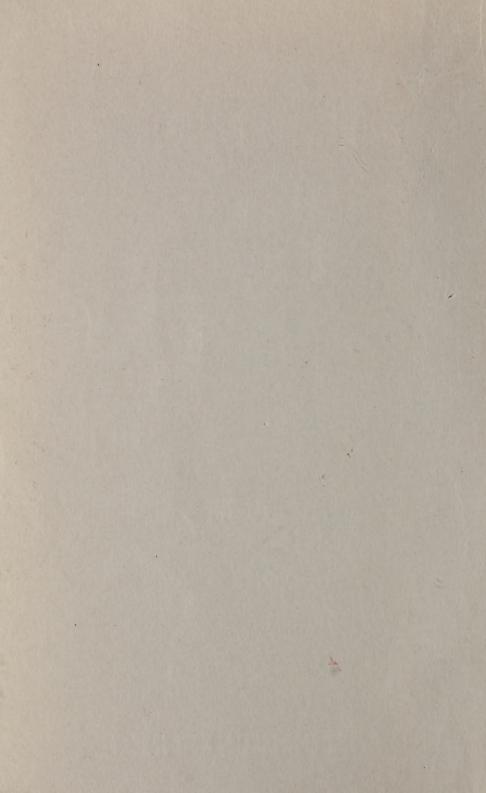


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# MONTCLAIR STATE COLLEGE

GRADUATE BULLETIN 1963-1964

UPPER MONTCLAIR, NEW JERSEY



# BULLETIN

OF

# Montclair State College

GRADUATE DIVISION

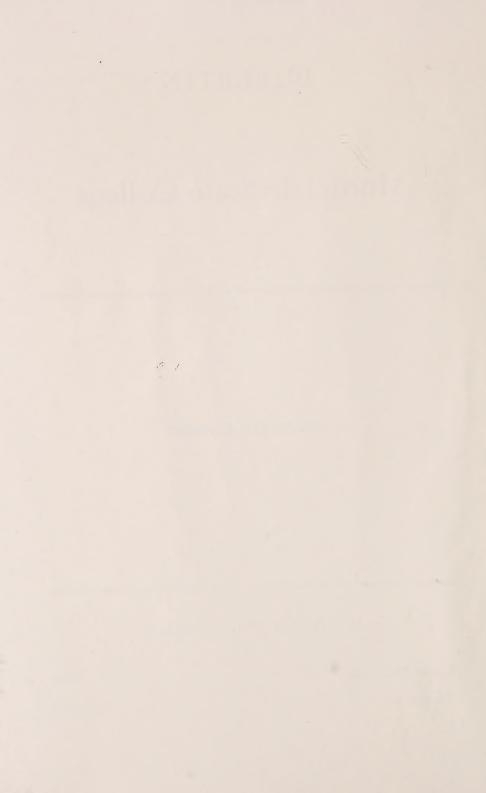
# MONTCLAIR STATE COLLEGE

Upper Montclair

1963

VOLUME 56

NUMBER 2



# MONTCLAIR STATE COLLEGE

# CALENDAR 1963-1964

# Graduate and Part-Time Division

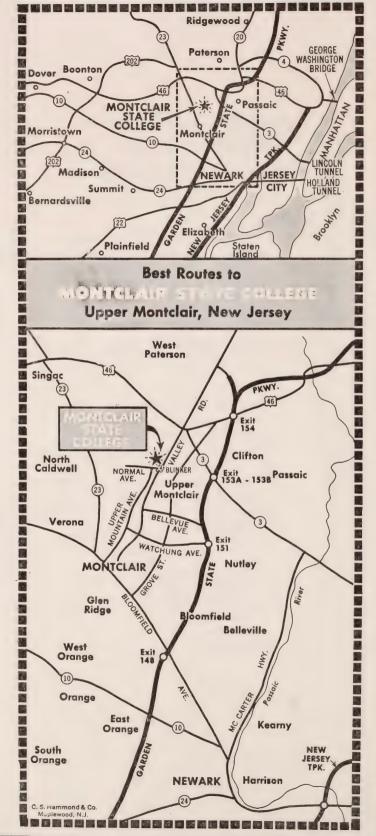
1963	
September 14, 16, 17	Registration
September 18	Graduate and Part-Time Classes Begin
September 24	Fall Convocation and Commencement Exercises 10:30 a.m.
November 7-9	Faculty Institute, No Classes
November 15	Mid-point of Semester
November 28-30	Thanksgiving Recess
November 15	Final Date for Filing Application for Conferment of M.A. Degree, 1964
December 18	Christmas Recess Begins at Close of College Day
1964	
January 1	New Year's Day—No Classes
January 2	Classes Resume
January 25	Graduate and Part-Time Classes End
January 25, 27, 28	Registration—Part-Time and Extension Division
February 1	Classes Begin—Part-Time and Extension Division
March 26	Spring Recess Begins at Close of College Day
April 6	Classes Resume—Mid-Point of Semester
April 15	M.A. Comprehensive Examinations—6:30 p. m. Admin. & Super., Bus. Ed., Ind. Arts, Foreign Language, Personnel & Guid., Speech
April 18	M.A. Comprehensive Examinations—9:00 a.m. English, Math.
May 14	Advanced Registration for Summer School—Undergraduate Division Only
May 23	Last Day of Classes—Part-Time and Extension Division

Baccalaureate

Commencement

May 31

June 3



#### HOW TO GET TO MONTCLAIR STATE COLLEGE

#### Location

Montclair State College is on Valley Road and Normal Avenue, Upper Montclair (turn at the blinker). The College is one mile south of the junction of Routes 3 and 46 on Valley Road.

#### DIRECTIONS FOR REACHING THE COLLEGE:

From Bloomfield Avenue, Montclair Center (Sears' store) proceed north on Valley Road — two miles to the Normal Avenue blinker.

Heading east on Route 46, the landmark is West's Diner; take the next right, Valley Road — one mile to blinker at Normal Avenue.

Heading west on Route 46, the landmark is the junction with Route 3. Turn on Valley Road to Montclair, bear right on cloverleaf and proceed south under Route 46—one mile to blinker at Normal Avenue.

From the Turnpike north of Exit 10 or south of George Washington Bridge turn at Route 3 West or Route 46 West, then as above. From the Turnpike south of Exit 10, leave the Turnpike at Exit 10 and follow directions for Garden State Parkway North.

Heading north on the Garden State Parkway, turn left at Exit 153B and proceed west on Route 3 to Valley Road.

Heading south on the Garden State Parkway, turn at Route 46 West (Clifton Exit 164) thence to Valley Road. If you miss that turn, continue south to Exit 151, Watchung Avenue, thence west to Valley Road and north to blinker at Normal Avenue.

The No. 60 Public Service Bus from Newark to Montclair terminates at the southwest end of the campus.

The No. 76 Public Service Bus from Paterson to Orange stops at Valley Road and Normal Avenue.

The No. 66 DeCamp Bus from New York, which leaves on the half hours from Platform 73, Port Authority Bus Terminal, stops at Valley Road and Mt. Hebron Road — one long block from the campus.

The *Erie Railroad*, Montclair Heights Station, is at the southwest corner of the campus.

# WHEN IN DOUBT-CALL PILGRIM 6-9500

#### FOR INFORMATION ABOUT:

#### WRITE TO:

General Policies and Program ...... Dr. E. Dealton Partridge, President Instructional Program and Policies, Dr. CLYDE M. HUBER, Dean of the College Admission to the Graduate Division Mr. Edward J. Ambry, Coordinator of Graduate Studies Admission to Undergraduate Division Mr. George G. King, Director of Admissions Part-Time and Extension Courses and Summer Session Mr. Anthony Kuolt, Director of Field Services Business and Financial Matters . . . Mr. Bernard Siegel, Business Manager Student Personnel Services, Scholarships and Loans, Dormitories MR. LAWTON W. BLANTON, Dean of Students College High School, Dr. Keith W. Atkinson, Director of College High School Student Teaching and Placement DR. NORMAN E. LANGE, Director of Student Teaching and Placement Certification ...... MISS SIMONE C. PICARD, Evaluator, Field Services Transcripts, Records, Catalogs ...... Mr. Peter P. Stapay, Registrar Alumni Affairs . . . . . Mrs. Helen Z. Rendall, Alumni Secretary Public Information ... Mr. Morris G. McGee, Coordinator of Public Relations

Film Rentals ..... Audio-Visual Department

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ALLAN MOREHEAD, Ed.D.	
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GEORGE E. SALT, A.M.	
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LOUIS E. ZERBE, M.Mus Associate Professor of Music

<sup>\*</sup> On Leave of Absence

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#### GENERAL INFORMATION

# History and Development of the Graduate Division

In 1908 Montclair State College began its teacher-education program as a two-year normal school. In 1927, by action of the State Board of Education, it was changed to a State Teachers ('ollege with four-year curricula leading to a Bachelor of Arts degree and certification to teach in the secondary schools of the State. Extension courses were instituted in 1929, and summer sessions in 1930, to enable teachers who held only a diploma and a teacher's certificate to obtain a Bachelor's degree.

Subsequently, the State Board of Education authorized, in June, 1932, the establishment of appropriate graduate programs leading to the Master of Arts degree, which the College was empowered to grant. Graduate studies were first offered in the summer of 1932 and have been continued in all regular and summer sessions since that time.

In 1937, the Middle States Association reviewed and accredited the graduate program and has since done so regularly, as has the American Association of Colleges for Teacher Education, whose function has since been assumed by the National Council for the Accreditation of Teacher Education. In 1948, the Graduate Committee was formed as a sub-committee of the Administrative Council to co-ordinate the graduate work of the various departments participating in it and to establish policies and standards appropriate to Master's degree programs. Since 1956, this Committee, under the title of Graduate Council, has assumed greater responsibility for the conduct of graduate work.

On July 1, 1958, by action of the State Board of Education, the name of the College was changed to Montclair State College. Its function, however, continues to be that of a professional school devoted primarily to serving the interests of secondary education in this State.

The last decade has witnessed a rapid but orderly expansion of the entire College. The construction of additional modern physical facilities, the development of a graduate faculty as an identifiable entity, and the establishment of new and appropriate degree programs. have kept pace with both the increasing graduate student enrollment and the educational needs of New Jersey.

Currently there are more than 1,700 students registered in the various courses of this division, with approximately 1.000 students matriculated in ten different academic programs leading to the Master of Arts degree.

# Professional and Academic Status of the College

# Accreditation and Memberships

Montclair State College is a fully accredited member of the Middle States Association of Colleges and Secondary Schools. In addition, the National Council for the Accreditation of Teacher Education has granted it full accreditation for the preparation of elementary and secondary school teachers, and school service personnel, with the Master's degree as the highest degree approved. Credits are exchangeable among colleges and universities which are members of regional and national associations to the extent to which the degree requirements of individual institutions permit the acceptance of transfer credit.

The College holds memberships in the American Association of Colleges for Teacher Education, the American Council on Education, The Association of State Colleges and Universities, and the New Jersey Association of Colleges and Universities. Graduates of the College are accepted for membership in the American Association of University Women.

#### The College Library

The Harry A. Sprague Library was opened in the Fall of 1963. Funds of over \$1,000,000 for this library building were provided for in the New Jersey Bond Issue of 1959. The library is of modern construction using brick, glass and aluminum facings. It is completely air conditioned. It has three floors, and is planned to accommodate 800 students and an eventual collection of 200,000 volumes.

The main floor includes the Circulation Area, the Technical Processes Area, and the Reference and Bibliography Center. Here, also, is the Humanities Center, which includes books and periodicals in the fields of Philosophy, Religion, Literature, Languages. Music. Fine Arts, History, Biography and Fiction.

The second floor has three main subject areas. The Science and Mathematics Center includes books and periodicals in the fields of Physics, Chemistry, Astronomy, Geology, Biology, Botany, Zoology and in the various branches of Mathematics. The Social Science Center contains books and periodicals in the fields of Sociology, Political Science and Government, Economics, International Relations, Anthropology and Geography. The Education Center contains books in Education, Psychology, Physical Education, Health, Industrial Arts and Business Education. Near the Education area is a curriculum laboratory. On the lower level there is an Art Gallery, a Reserve Book Room, lounges and storage areas.

Special collections are located in a separate room on the second floor. These collections include the China Institute Library, the Lin-

coln Collection, the Alumni Memorial Library, the Webster Collection, the Finley Collection and the College Archives.

Two classrooms are located outside the main area of the library but are an integral part of the building. Faculty carrels, individual study desks, typing areas, and conference rooms are also provided.

# The Administration of the Master's Degree Programs

In the organization of the College, the administrative unit which is responsible for the proper functioning of Master's degree curricula is the Graduate Council. Its membership consists of those administrative officials of the College who are ex-officio closely associated with graduate studies, together with others who represent the various departments offering Master's degree programs. Departmental representatives on the Council are appointed by the President of the College, upon the recommendation of a committee of graduate faculty members whose chairman is the Dean of the College.

The Council's chief function is to develop the basic standards, policies, and procedures which govern the granting of Master's degrees to approve new programs, and to engage in a continuous evaluation of all Master's degree work.

Graduate program policies and procedures are administered by the Coordinator of Graduate Studies in cooperation with the various Master's degree program advisors and the Dean of the College, who supervises the activities of the Graduate Division and is responsible to the President of the College. All programs, policies, and procedures are subject to approval by the State Board of Education.

# Graduate Faculty

Faculty members serving the Graduate Division are with few exceptions members of the full-time staff of the College. Those who have attained the rank of associate professor or higher, or have an earned doctorate, are eligible for appointment to the graduate faculty. In addition to those with such evidence of scholarship, a limited number of experienced teachers who have demonstrated excellence in classroom instruction are assigned to teach graduate classes. While the graduate faculty is an identifiable entity, its members are not restricted to advanced instruction. Graduate courses taught constitute only a part of the regular schedule of those participating in this program.

# Graduate Students

Montclair State College is a professional school devoted primarily to the interests of secondary education. The major goal of all its courses is the development of the competence of the teacher as a professional person.

The courses are organized to serve the interests of three specific groups of students:

- Group I Those who wish to matriculate for the degree of Master of Arts: teachers-in-service, as well as those interested in personal and professional growth who hold a Bachelor's degree from an accredited college or university, have a high scholastic average, and hold a New Jersey teacher's certificate;
- Group II Those who do not wish to matriculate for the degree of Master of Arts: students who hold graduate degrees and wish to continue their professional preparation; college graduates who wish to take courses leading toward secondary school certification; students who are matriculated for advanced degrees in other colleges and who plan to transfer their credits; and special students taking courses for cultural purposes without reference to credit;
- Senior-Graduate students (Montclair State College sen-Group III iors only) currently enrolled in the College who have good academic records and who are within sixteen semester hours of graduation may be permitted to take a maximum of eight semester hours of graduate work concurrently with any remaining semester hours to meet the requirements of the degree and prior to graduation. Any qualified applicant should obtain the appropriate application form from the Graduate Office, which when properly filled out will permit him to have his request considered by the chairman of the department concerned, the Dean of the College, and the Coordinator of Graduate Studies. He should then register for this special work in the office of the Director of Field Services. This does not constitute application for the Master's degree. No graduate credit will be given retroactively for work taken in excess of the degree requirements.

#### Certification Students

Students holding Bachelor's degrees from other colleges who plan to take courses leading to certification for secondary school teaching should:

1. Obtain a written statement of their individual requirements from their County Superintendent of Schools. To obtain such

a statement, official college transcripts and a letter stating the subject in which certification is desired must be forwarded to the County Superintendent of Schools.

- 2. Correspondence subsequently received from the County Superintendent of Schools, as well as transcripts of all previous academic work, must be presented at registration.
- 3. All general questions regarding certification should be addressed to the Certification Advisor at the College; pre-registration advisement, by appointment, is recommended.

# Certification Students and the Master's Degree

Students holding Bachelor's degrees from other colleges must be fully certified to teach in the area of their major specialization by the time the Master's degree is conferred. Students should have completed their supervised student teaching or have had one year of successful teaching experience under provisional certification before they can matriculate for the Master's degree.

Those who lack some of the required preparation for limited secondary certification, or certification in either professional or special subjects for both elementary and secondary schools, may need to register for certain undergraduate courses in the 200 and 300 series, which courses will not carry graduate credit. However, if the required professional certification courses are taken in logical sequence, some of them in the 400 series, or above, may be counted toward the limited certificate as well as toward the Master's degree. Students who are interested in correlating their work for certification with some work toward the Master's degree should arrange an advisement interview with the College Certification Advisor to determine whether certain courses available might serve these combined purposes.

# Certification Students and Student Teaching

Graduates of other colleges who wish to do their student teaching through Montclair State College should obtain a statement from the Director of Student Teaching and Placement outlining the conditions under which it can be done. This group will be expected to meet the standards established for Montclair State College students before being assigned for student teaching.

Students who desire to meet the State requirement in supervised student teaching must be approved by the Director of Student Teaching, after which approval they will register for this course in the office of the Director of Field Services. Supervised student teaching does not carry credit toward the Master's degree.

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#### The Graduate Point of View

In its operational framework, graduate work consists of a logically integrated program of advanced, specialized courses based on an un-

dergraduate major and/or other adequate background.

Because of its very nature, graduate work calls for the highest performance on the part of the student with ability, perseverance, and scholarly interests. It is expected that each individual will supply the continuing motivation essential to attain the professional growth which is the ultimate aim of advanced study in teacher education.

The objective in each of the Master degree curricula is to develop a greater degree of professional competence in the basic subject matter of the area of specialization, knowledge of the current literature relating to it, and ability to use and interpret the results of the reported

investigations of others.

The various degree programs provide the background and tools needed for study in a given area. Through the basic research courses and other tasks, the student finds opportunities for personal and professional growth. There is also in each program a chance for the student to enrich his general education through appropriate elective experiences which will provide breadth of study.

# Master's Degree Specialization Areas

Majors in graduate work are offered in the fields of Administration and Supervision, Business Education, English, Foreign Languages, Industrial Arts, Mathematics, Personnel and Guidance, Science, Social Studies, and Speech. Mas: Phys Ed

# Master's Degree Program Patterns

The curriculum pattern for each of the Master's degree programs includes experiences in four areas: 1) professional education, 2) subject matter specialization, 3) research, and 4) general education electives.

# 1. Basic Professional Education

A limited portion of the graduate program is assigned to education courses which will permit the student to continue exploration of philosophical, psychological, sociological, and historical phases of his professional training in advanced courses in this area.

# 2. Area of Concentration

The main emphasis in the graduate study program of each student will be devoted to increasing the student's knowledge and competence in his field of specialization.

#### 3. Research

It is important that each graduate student should have experience in the acquisition and analysis of information relative to a problem in his field of specialization. The program provides for a basic course in the techniques and procedures of research, and an area of specialization seminar or a thesis.

#### 4. General Education Electives

The purpose of the general education electives is to contribute to the individual's cultural development. Each student should extend his study outside of his specialty and into other areas in his academic disciplines. In the selection of the electives, the student is cautioned about a choice of highly specialized single-purpose technical and professional skill courses. For the student with a strong foundation in the liberal arts, the credits in the elective group might be used to strengthen his competence in a second area of certification, or in a discipline related to the major area. Within this framework a definite program of course possibilities should be worked out which will complement the student's previous education so that his resources of skill and knowledge are properly balanced, and he is given the most advanced work for which he is qualified.

# Admission and Matriculation for the Master's Degree

- 1. The applicant for admission to any of the Master's degree programs should be a graduate of an accredited college or university and must present evidence of his qualifications for advanced study as shown by a high scholastic record, professional teacher-education training, and experience. The College may require an applicant with a doubtful undergraduate record or a Bachelor's degree from a non-accredited institution to take qualifying examinations, such as the Graduate Record Examination or any other suitable test it may consider necessary, to determine a student's acceptability for matriculation in the Master's degree program of any department.
- 2. It is in the student's own interest that he determine his eligibility for matriculation before initiating a program of graduate study. However, his formal matriculation (i. e., official acceptance in writing by the Graduate Office in a program leading to the Master's degree) may be deferred for good reason until no more than eight semester hours of graduate credit have been earned.

- 3. Prior to admission and matriculation, each student indicates the Master's degree area in which he will complete such courses as are prescribed. Upon his formal acceptance, an official work program is made out in conference with a departmental advisor appointed for this purpose.
- 4. To be eligible for matriculation in a major subject area, a student must present evidence, in the form of an official undergraduate transcript, of work in the undergraduate major as indicated in the departmental statements describing the various programs.
- 5. Since the College is a professional institution, applicants for matriculation in these programs must possess a valid certificate to teach the subject of specialization in the secondary schools of the State of New Jersey. Applicants who are not so certified should study the information relating to certification and the Master's degree on pages 16 and 17.
- 6. To be eligible for matriculation in the several professional education programs in the Department of Education, it is required that a student be certified to teach in New Jersey and also to have acquired some successful teaching experience. Two full years of experience are required for acceptance in the program in Administration and Supervision, and one full year for Personnel and Guidance.

# Steps in the Matriculation Process

- 1. The applicant secures an application form in the Graduate Office which must be completed and returned to that office together with, a) a personal statement of his objectives as required on the application form; b) a check or money order for the required application fee; and c) a photo copy of his teaching certificate.
- 2. The applicant will have his college send official transcripts of all college credits (if the applicant is not a graduate of Montclair) to the Coordinator of Graduate Studies. The completed application, fee, and official transcripts should be on file in the Graduate Office at least one month before the time of registration for graduate courses.
- 3. A review of the student's undergraduate record and other qualifications will be made in the Graduate Office. The applicant will then be notified as to what action has been taken on his application.

- 4. The applicant who meets admission requirements will next confer with the graduate advisor in the department in which he expects to do his work and when he is eligible for matriculation, the advisor will develop a formal program of courses with him.
- 5. A final conference with the Coordinator of Graduate Studies may be arranged, if necessary. Following this, the applicant will be advised in writing of the decision of the Graduate Council, and if accepted, he will be furnished with a statement of the course of study (Official Work Program) to be completed within a six-year period.
- 6. Final action on all applicants is vested in the Graduate Council. For good reason, legitimate adjustments may be made at any time in the student's original program, with the approval of his program advisor and confirmation of this action by the Coordinator of Graduate Studies. (Amendments of this nature are made on an appropriate form available in the Graduate Office.)

# Types of Admission in the Degree Programs

- Regular admission for applicants eligible to be fully matriculated.
- 2. Conditional (granted because specific undergraduate course deficiencies exist).
- 3. Probational (granted for one summer or semester, to determine a student's scholastic ability).

# Procedure for the Admission of Veterans

A prospective student with the special classification of a veteran should determine his admission status with the Graduate Office before making application for a Certificate of Eligibility for matriculation.

# Requirements for the Master of Arts Degree

- 1. A minimum of thirty-two semester hours of graduate credit is required in all departments. Additional hours may be added to compensate for any deficiencies found in the applicant's undergraduate record.
- 2. Each major department requires a minimum of at least eighteen semester hours of graduate work in the area of specialization.

- 3. No less than six semester hours of the required total of thirty-two semester hours must consist of professional education courses in the Department of Education. One two-semester hour course in this group, Education 503, Methods and Instruments of Research, is required of all students matriculated in the Graduate Division and must be taken in residence.
- 4. Each candidate (matriculated after August 31, 1959) must complete Education 603, Principles and Practices of Research for two semester hours, or an equivalent research seminar in the department of his major subject. Education 503, Methods and Instruments of Research, is a prerequisite for this required course.
- 5. An average grade of "B" or better is required for work submitted for the Master's degree. No graduate credit is given for work below "C."
- 6. The majority of the courses taken or credits earned should be on the 500-600 level.
- 7. Work for the Master's degree must be completed within six years after the date of matriculation. If an extension of time is required, a request for such extension must be filed with the Coordinator of Graduate Studies. The student's progress will then be reviewed and evaluated in accordance with the requirements for the degree as stated in the most recent Graduate bulletin and with the established policy for this type of reinstatement.
- 8. A comprehensive departmental examination or its equivalent is required in all departments. This examination may be written and/or oral. The oral phase of the examination will be on an individual basis. The examination is given during the Spring semester, prior to graduation, by the department in which the student does his major work. (Consult the Part-Time and Extension announcements for dates.)
- 9. Four of the total credits can be satisfied by a thesis which meets the approval of the Graduate Council. In some departments the thesis may be offered in place of the written comprehensive examination, and/or the oral examination.

# 10. Residence requirements

- a. A minimum of thirty-two semester hours of graduate work in residence is required except as noted in item 11.
- b. The student must attend the College as a full-time graduate student for at least one summer session (six semester

hours), or one regular semester (twelve semester hours) to meet the residence requirement.

Fully employed teachers are encouraged to restrict the graduate work carried during the year, and to take advantage of the course offerings in the summer session when their normal professional responsibilities will not interfere with the study expected of advanced students.

#### 11. Transfer credit

With the approval of the student's program advisor and the Coordinator of Graduate Studies, a graduate of an accredited college or university who has matriculated on or after April 12, 1962, may transfer some graduate credits. The maximum amount of credit which may be accepted is eight semester hours. The usual procedure is to arrange in advance for this privilege, and to make application for acceptance on a form available in the Graduate Office.

#### 12. Certification evidence

To receive final approval by the Registrar as a candidate for the degree, the student must have evidence in his official file in the Graduate Office to indicate that he has met the certification requirements for the program for which he was matriculated. This evidence may consist of either a photocopy of the essential certificate to teach, or a letter of eligibility.

# 13. Application for Conferment of the Degree, and attendance at

Candidates must file with the Registrar an application for conferment of the degree before November 15 of the college year in which the work is to be completed. Application blanks for this purpose may be secured from the Registrar. Responsibility for the request rests with the candidate. This is of special significance to the teacher-in-service who may have distributed his graduate work over five or six years.

The student should note that attendance is required at commencement, unless permission for graduation in absentia is granted by the President of the College.

# Graduate Research and the Master's Thesis Research

Courses and research seminars will introduce the student to research methods in the several disciplines and indicate what and where are the basic sources of information. They will require him to survey the professional literature of his major. An advanced research study,

essay, or research report is required in all the Master's degree pro-

grams by means of the departments' research seminars.

Creative work, or distinguished performance involving intellectual as well as technical mastery, may be substituted in the programs in the arts, music, literature, etc. The essential element in this type of experience is independent work in depth by the student, whatever its form. Whether or not it is carried out in connection with courses is immaterial if the investigation conducted under faculty supervision requires the student to work independently on his own and to demonstrate his capacity to find, assess, organize, treat, and interpret his materials in a scholarly manner.

As the basic style and guide for research reports, investigations, and theses, the Graduate Council has adopted William G. Campbell's Form and Style in Thesis.

#### The Master's Thesis

To encourage scholarly students to develop a thesis, a department may accept it as equivalent to the required research seminar, and/or in lieu of all or part of the final comprehensive examination. Students writing a thesis must receive the approval of their departmental advisor and the Coordinator of Graduate Studies, and must register for the course, Graduate 600, Master's Thesis, for four semester hours. Information which will aid students submitting a Master's thesis is available in the Graduate Office.

Students are expected to complete the thesis within one calendar year. An extension of time may be granted by the Coordinator of Graduate Studies after consultation with the student's advisor. If granted, the student must re-register for Graduate 600 on a no-credit basis and pay a fee for two semester hours. This extension will be for six calendar months.

# Information Relative to the Implementation of Program Policies

1. Explanation of the Course Numbering System

a. Eligibility for enrollment

Courses in the 500 and 600 series are open only to graduate students. Those in the 400–499 series and listed in this bulletin may be selected by graduate students for graduate credit. When courses in this series are given for certification and/or the Master's degree programs, they will be open only to those advanced senior-undergraduates with a high scholastic average who receive the written approval of the Dean of the College. (A special form provided for this must be obtained in the Graduate Office.)

To be eligible for a course, students must have completed the logical sequential prerequisites for it, as well as any specific prerequisites indicated in the course description.

b. Master's degree credit

The responsibility of taking the right courses for the program being pursued rests with each student. It is important that at each registration period the student bring with him his official work program, together with his transcripts of graduate work taken at this College so as to avoid taking courses that cannot be counted toward the degree.

c. Special restrictions for graduate program credit

 No credit is granted toward the Master's degree for courses with a grade below "C," or for courses taken more than ten years previously, or for certain specifically designated basic courses on the 400 level which are required for initial certification.

2) No more than eight semester hours of graduate credit taken prior to matriculation, or more than six semester hours of graduate credit in extension (off-campus courses) may be credited toward the Master's degree.

3) No graduate credit is granted retroactively for work taken in excess of undergraduate degree requirements.

4) No graduate credit is allowed for concurrent registration (enrollment) in other colleges without the approval of the Coordinator of Graduate Studies.

5) No graduate credit is granted for courses in which a student who has been an auditor, decides to take the course for credit, without official permission. Such changes must be made before the mid-point of the semester.

6) Since some course numbers have been changed, responsibility for avoiding duplication is placed upon the student. No course once taken for credit may receive credit a second time under another number.

2. Rating system

Marks indicating degrees of achievement in the various courses are given in letters A, B, C, D, and F.

A — Excellent

 $\mathbf{B} \longrightarrow \mathbf{Good}$ 

C — Fair

D — Poor (No "D" credit may be counted toward the Master's degree)

F — Failure

Inc. — Incomplete work\*

WP - Withdrawn, passing

WF - Withdrawn, failing

#### 3. Retention standard

The Coordinator of Graduate Studies and the student's program advisor may, for good reason, revoke the matriculated status of any one who is found to lack the qualifications of personality, integrity, temperament, emotional adjustment, or physical stamina, or after it has been established that there is evidence of serious unprofessional conduct.

A student who does not maintain an acceptable standard of scholarship (an average of "B" or better) will be placed on probation. If it then becomes apparent that he is unlikely to achieve an acceptable standard, he will lose his status as a matriculated student.

#### 4. Student load

Graduate work should involve careful and intensive study with ample time to explore areas which may warrant further study. Twelve to sixteen hours of work per semester is considered a full-time program for the graduate student in residence.

For teachers, or others employed full time, six hours of work in any one semester shall be the maximum load, with four semester hours being recommended.

In the regular six-week summer session, the maximum load shall be eight semester hours. However, the Graduate Council strongly recommends that the student consider six semester hours of work a full program.

# 5. Fees and service charges

Tuition

New Jersey residents and teachers

11 ou berseg residents and teachers	
per semester hour of credit	\$16.00
Non-Residents per semester hour of credit	18.00
Service charge per semester hour of credit	.50
Registration (non-refundable)	2.00
Late registration (non-refundable)	5.00
Application for admission to degree granting program	
(non-refundable)	5.00
Transcript (Inquire in Registrar's office) each copy	1.00
Supervised student teaching (if required)	60.00

<sup>\*</sup>Where a student has had an unavoidable absence, or presents other good reasons in accord with approved policy, a course may be marked "Incomplete" at the end of a semester or summer session. This mark must be removed by a final grade within eight weeks, or the course cannot be credited and the mark becomes "F" automatically.

6. Change of schedule or program

No student will be permitted to change his scheduled courses without the approval of his advisor and the Director of Field Services. The deadline for making changes is the last day of the late registration period. To change from "auditor" to "credit," or vice versa, a student must make formal application not later than the mid-point in the semester. Forms are available in the Graduate Office.

7. Withdrawal from a course

A written notice filed in the office of the Director of Field Services is required. (Refunds are computed from the date of receipt of such written notice.) Students who do not submit a written notice will receive the mark of "F" in those courses which they cease to attend. Non-attendance at classes or oral or written notification to the instructor does not constitute a formal withdrawal.

Students who withdraw after the mid-point in the semester will receive an automatic grade of "F," except in certain very exceptional cases that receive approval.

8. Course offerings and schedules

Regular bulletins are published for the information of those who wish to attend part-time, extension, or summer session courses. These contain a list of course-offerings, time of class meetings, room assignments, and instructors for the scheduled classes. Other information may be obtained from the Director of Field Services, Montclair State College, Upper Montclair, New Jersey.

9. Programs, regulations, and procedures are subject to change A continuous effort will be made to keep students informed of all important changes in the policies or procedures of the Graduate Division; however, each student is given the responsibility of keeping himself informed of the present status of the graduate program and his progress toward the Master of Arts degree.

#### DEPARTMENT OF BUSINESS EDUCATION

The graduate work in the Department of Business Education is designed to prepare teachers of business education for administrative, supervisory, specialized work or master teaching in the field of business education. In order to attain these objectives the candidate has an opportunity to supplement his undergraduate program and to explore advanced areas of work in accordance with his individual background, experience, achievement, and professional needs.

Graduate work toward the Master of Arts degree in Business Education presupposes the completion of an undergraduate major in business education, or its equivalent. The undergraduate major is based on the requirements as established by the New Jersey State Board of Education. For further details see the Undergraduate Bulletin.

In lieu of four of the thirty-two semester-hours of credit required for the Master of Arts degree, the candidate may write a thesis giving the results of some research in the field of business education or its teaching. This research may be made only after consultation with the Chairman of the Business Education Department. Plans should be made to have the thesis in its final form and approved by the Department of Business Education by May 1st of the year in which the degree is expected to be conferred.

All candidates for the Master of Arts degree in Business Education must pass a comprehensive examination before they are granted the degree. This examination is given early in April for those candidates anticipating graduation in June or September. It is general in nature and is intended to test the candidate's maturity of thought with respect to business education.

### GRADUATE PROGRAM OF STUDIES MASTER OF ARTS DEGREE IN BUSINESS EDUCATION

Division I. Rec	quired Education Department Courses (6 s.	h. re-	
quired)			
Ed. 503. Ed. 509. Elective	Methods and Instruments of Research Basic Educational Concepts To be chosen on recommendation and approval of the Chairman of the Department of Business Education	2 s. h. 2 s. h. 2 s. h.	
Division II. Res	search Seminar, Field Work and Thesis (8 to 10	s. h.)	
<ul><li>B. E. 501A.</li><li>B. E. 501B.</li></ul>	Research Seminar in Business Education Evaluation of Current Literature in Business Edu-	2 s. h.	
Graduate 600.	cation	2 s. h. 4 s. h.	
B. E. 532.	Field Studies and Audio-Visual Aids in Business	T S. II.	
	Education	4 s.h.	
B. E. 533.	Supervised Work Experience and Seminar	4 s. h.	
Division III. Required Business Professional Courses			
Group A - (	(4 s. h. required)		
B. E. 502.	Principles and Problems of Business Education	2 s.h.	
B. E. 503. B. E. 504.	The Business Education Curriculum	2 s. h.	
27. 27. 001.	cation	2 s.h.	
B. E. 505.	Tests and Measurements in Business Education	2 s. h.	
<i>Group B</i> — (4 s. h. required)			
B. E. 520.	Improvement of Instruction in Business Education		
Part A. Part B.	General Business Subjects	2 s. h. 2 s. h.	
Part C.	Secretarial Subjects	2 s. h.	
	rt may be elected separately. A minimum of two		
parts must be completed.			

### Division IV. Elective Subject-Matter Courses

(8 to 10 s. h. required — dependent on the total accumulated in Division II — to be selected after consultation with the Chairman of the Department of Business Education.)

undergraduate bulletin.

<sup>\*</sup> Students writing a thesis will take B. E. 501A and will substitute four (4) semester-hours for the thesis in place of B. E. 501B. This will count as a total of six (6) semester-hours in research and thesis.

Note: With the approval of the Chairman of the Department, Senior-Graduate Courses (400 level) may be elected from the business education program described in the undergraduate bulletin

#### THE GRADUATE COURSES

## Business Education 501A and B. Research Seminar in Business Education-Evaluation of Current Literature

This course deals with research and literature in the field of business education. The emphasis is placed on making the classroom teacher an intelligent consumer of the current research findings and publications related to business education.

Prerequisite: Education 503

Credit: 4 semester-hours

### Business Education 502. Principles and Problems of Business Education

The purpose of this course is to survey the basic principles and practices of business education. Among the topics considered are: history of the high school business program, purposes, attitudes of management and labor toward education, the relationship of general education to business education, and trends in the field. This course should be scheduled early in the graduate program.

Credit: 2 semester-hours

### Business Education 503. The Business Education Curriculum

This course is a sequel to Business Education 502. It deals with the curricula in business education for various levels and types of schools. In this course, the student learns how to evaluate present programs and to make recommendations for needed changes.

Prerequisite: Business Education 502

Credit: 2 semester-hours

### Business Education 504. Administration and Supervision of Business Education

This course offers an opportunity to study the problems of organizing, directing, and supervising business education programs. Such matters as the functions of the administrator and supervisor of business education, textbook selection, teacher selection, testing programs, conferences, and equipment and layout are considered. It is a valuable course for prospective administrators.

### Business Education 505. Tests and Measurements in Business Education

This course deals with constructing, administering, interpreting, and evaluating all types of testing materials in business subjects.

Credit: 2 semester-hours

### Business Education 516.—Business Organization and Management Problems

The problems approach is used in this advanced course in considering such topics as business ownership, finances, location and layouts, purchasing, personnel, and managerial controls.

Credit: 2 semester-hours

#### Business Education 518. Advertising Media

This course in advertising offers an opportunity to study in some detail the uses of various advertising media such as newspapers, magazines, radio, television, and direct mail, and to evaluate their effectiveness in terms of campaigns.

Credit: 2 semester-hours

### Business Education 520A, B, C. Improvement of Instruction in Business Education

These courses give the experienced business teacher an opportunity to study the content, methods, teaching aids, and evaluation procedures in at least two of the three specialized fields:

### Business Education 520A.\* General Business Subjects Credit: 2 semester-hours

### Business Education 520B.\* Bookkeeping, Accounting, and Business Arithmetic

Credit: 2 semester-hours

### Business Education 520C.\* Secretarial Subjects

Credit: 2 semester-hours

Prerequisite: Teaching experience in the field of business education.

\*Note: A minimum of two (2) parts of Business Education 520 must be completed.

### Business Education 532. Field Studies and Audio-Visual Aids in Business Education

This course gives the classroom teacher an opportunity to visit and evaluate some of the practices of many business offices, industries, and retailing organizations located in the metropolitan area. It also provides for a study of the many audio and visual aids available for use in business classes.

Credit: 4 semester-hours

### Business Education 533. Supervised Work Experience and Seminar

The graduate student who has not had extensive business experience has an opportunity to work full-time for six weeks during the summer in a business position under College supervision. An evening conference is held weekly to discuss problems related to the work experience program.

Credit: 4 semester-hours

#### Business Education 540. Auditing

This course seeks to develop the meaning and techniques of auditing procedure. It includes practice in the fundamental mechanics of auditing as well as in the making of the formal report on an audit.

Prerequisite: 8 semester-hours of accounting

Credit: 2 semester-hours

### Business Education 542A. Advanced Business Law Cases I

This course presupposes a knowledge of the basic principles of business law. It is designed to furnish a broader understanding and background in areas requiring considerable training to be effective in the classroom. Cases are concerned with the topics of contracts, negotiable instruments, and insurance.

Credit: 2 semester-hours

### Business Education 542B. Advanced Business Law Cases II

This advanced law course is a continuation of Business Education 542A, but course 542A is not a prerequisite. A basic knowledge of the principles of law is, however, required. The course includes a further study of law cases pertaining to bailments, carriers, sales, property, landlord and tenant, torts, and business crimes.

#### Business Education 543A. Advanced Accounting I

The content of this course emphasizes an intensive study of the items making up accounting statements and the principles of evaluation and income determination. Problem solving is an integral part of the course. At least eight semester-hours of accounting are required as a prerequisite.

Credit: 2 semester-hours

#### Business Education 543B. Advanced Accounting II

This course is a continuation of Business Education 543A, but course 543A is not a prerequisite. Topics treated include consignments, agency and branch accounting, consolidations, receivership accounting, estate and trust accounting. At least eight semester-hours of accounting are required as a prerequisite.

Credit: 2 semester-hours

# Business Education 544A, B, C, D. Workshops in Secretarial and Clerical Practice, Advanced Stenography, Typewriting, Office Machines

These workshops which may run simultaneously provide an opportunity for the study, planning, and development of teaching materials and projects fitted to the particular situation in which the person is teaching. Instruction is on an individual and small-group basis with occasional seminar meetings of the entire group.

Prerequisite: Teaching experience in the field

#### DEPARTMENT OF EDUCATION

Graduate courses in this department meet one or more of three needs: (1) instruction in the Administration and Supervision major leading to the M. A. degree and New Jersey certification for one or more of the positions of Subject Supervisor, General Secondary Supervisor, Secondary School Principal, and Assistant Principal or Vice Principal; (2) instruction in the Personnel and Guidance major leading to the M. A. degree and New Jersey certification in guidance; and (3) advanced professional instruction for administrators, supervisors, counselors, and classroom teachers.

In pursuit of the above objectives most graduate courses in the Education Department are designed for students with teaching experience. Other graduate courses presuppose at least a teaching certificate.

Graduate students who do not hold teaching certificates will enroll in undergraduate and senior-graduate (400 level) courses in order to meet certification requirements. Under special and unusual circumstances, uncertified graduate students may also enroll, with the approval of the Chairman of the Education Department, in the following graduate courses in the Education Department: 500, 502, 505, 506, 507, 535, 560, 562.

Graduate students working toward an M. A. degree in Administration and Supervision are required to have at least two years of teaching experience before matriculation; those majoring in Personnel and Guidance are required to have at least one year of teaching experience before matriculation.

Students who plan to remain classroom teachers are not encouraged to seek an M. A. degree in either Administration and Supervision or Personnel and Guidance.

Three years of successful teaching experience in grades 7–12 are required for secondary school principal and secondary school vice principal or assistant principal certification.

### I. COURSE REQUIREMENTS FOR THE M. A. DEGREE IN ADMINISTRATION AND SUPERVISION

- A. Graduation from an accredited college or university, a New Jersey teacher's certificate, and two years of teaching experience completed prior to matriculation. Not more than eight semester-hours of work taken prior to matriculation may be counted toward this degree.
- B. Graduates of accredited colleges and universities may transfer not more than eight semester-hours of graduate work to be counted toward this degree upon approval by the Program Adviser and the Coordinator of Graduate Studies.

C.	Satisfactory completion of not fewer than thirty-two semester-hours of
	work as follows: (In exceptional cases appropriate substitutions or
	changes may be made in these requirements upon approval by the Pro-
	gram Adviser).

1.	Required	Courses — 20 semester-hours	S. H.
	Ed. 503.	Methods and Instruments of Research	2
	Ed. 510.	Introduction to Educational Administration	2
	Ed. 512.	School-Community Relations	2
	Ed. 514.	School Law	2
	or		
	Ed. 516.	School Finance	2
	Ed. 520.	Organization and Administration of the Modern	,
		H. S	2
	Ed. 530.	Curriculum Construction in the Secondary School	2
	Ed. 535.	Organization and Administration of Extra-Currie-	
		ular Activities	2
	Ed. 540.	Supervision in the Secondary School I	2
	Ed. 580.	Principles and Techniques of Guidance	2
	Ed. 603.	Principles and Practices of Research	2

- 2. Education Department Electives (6 semester-hours)

  The student, with his adviser's approval, will select six semester-hours in additional Education Department courses.
- 3. Electives in Other Departments (6 semester-hours)

  The student, with his adviser's approval, will select six semester-hours of course work in other departments. It is intended that the electives chosen shall be of a liberal-cultural orientation selected to broaden the student's interests and background.
- 4. Candidates for the Master's degree in Administration and Supervision will be required to pass a comprehensive examination.

### II. COURSE REQUIREMENTS FOR THE M.A. DEGREE IN PERSONNEL AND GUIDANCE

- A. Graduation from an accredited college or university, a New Jersey teacher's certificate, and two years of teaching experience. One year of this experience must be completed prior to matriculation. (Not more than eight semester-hours will be counted toward this degree prior to the obtaining of this certificate and the beginning of this experience.)
- B. Satisfactory completion of not fewer than 32 semester-hours as follows:

1.	Basic Reg	uirements	S. H.
	Ed. 503.	Methods and Instruments of Research	2
	Ed. 567.	Educational and Psychological Measurements	in
		Guidance	2
	Ed. 580.	Principles and Techniques of Guidance	2

2.	Select 4 s.	h. from the following	
	Ed. 560.	Advanced Educational Psychology	2
	Ed. 561.	Child and Adolescent Development	2
	Ed. 562.	Principles of Mental Hygiene	2
	Ed. 564.	Psychology and Education of Exceptional Children	
		- Physical and Mental	2
	Ed. 565.	Psychology and Education of Exceptional Children	
		- Social and Emotional	2
	Ed. 566.	Psychology and Education of the Gifted	2
	Ed. 568.	Psychological Tests in Guidance Programs	2
3.	Select 10	s. h. from the following (Ed. 580 is a prerequisite	
	for all of	the following.)	
	Ed. 581.	Community Resources for Guidance	2
	Ed. 582.	Vocational Guidance	2
	Ed. 583.	Educational Guidance	2
	Ed. 584.	Social-Moral Guidance	2
	Ed. 585.	Group Guidance and Counseling Activities	2
	Ed. 586.	Elementary School Guidance Services	2
	Ed. 587.	Administration and Supervision of Guidance Programs	2
	Ed. 588.	Techniques of Interviewing and Counseling	2
	Ed. 589.	Student Personnel Services in Higher Education.	2
4.	Select 4 s.	h. from the following	
	Ed. 601D.	Workshop in Education — Guidance	2-4
	Ed. 602.	Research Seminar in Guidance	4
	Ed. 604.	Field Work in Guidance	2-4
	Ed. 606.	Practicum in Guidance Services	2-4
5.	Free electi	ves in any department of the college	8

- Candidates for the Master's degree are required to pass a comprehensive examination.
- 7. A candidate may choose to write a thesis providing he receives the aproval of his adviser. Four semester-hours' credit will be granted for the completion of a thesis and the credits will be included in area 5 above.

Note: Deviation from the above program will be permitted only by permission in writing countersigned by the Coordinator of Graduate Studies and the Student's Program Adviser.

Special Note: Math. 400 (Elements of Statistical Reasoning) or equivalent, is a prerequisite to Ed. 503 and does not bear graduate credit.

Graduates from accredited colleges and universities may transfer not more than eight semester-hours of graduate work to be counted toward this degree upon approval by the Coordinator of Graduate Studies.

#### **GRADUATE COURSES**

Note: Previous course numbers are enclosed in parentheses. Students are not permitted to enroll in courses they have taken previously under other titles and/or other course numbers.

### Education 500 (500C). Recent Trends in Secondary School Methods

This course emphasizes the fundamental principles underlying the technique of teaching on the secondary school level. Some of the topics considered are: organization of knowledge, the logical and psychological aspects of method, developing appreciations, social-moral education, teaching motor control, fixing motor responses, books and verbalism, meeting individual differences, guidance in study, tests and examinations, marks and marking.

Credit: 2 semester-hours

### Education 501. Tests and Measurements in Secondary Education

The purpose of this course is to develop an appreciation of the meaning and importance of measurement in education, and to give a working knowledge of instruments of measurement.

Credit: 2 semester-hours

### Education 502(553). Teaching the Block of Time Curriculum in the Junior and Senior High School

This course concerns the structure, organization and methods of teaching block of time curriculums in secondary schools, after a discussion of underlying philosophy and historical development.

Credit: 2 semester-hours

### Education 503. Methods and Instruments of Research

This course is required of all regularly matriculated candidates for the Master's degree without regard to their field of major interest. Its purpose is to introduce students of education to research and its practical application to professional problems. The course treats: the nature and types of educational research; methods and techniques of educational research; and the tools used in interpreting statistical data. During the course, the student completes his outline and may complete his research either in this course, in Education 603, or in his departmental seminar or research course. It is recommended that this course be taken rather early in the graduate program and must precede work in departmental seminar or research courses.

Prerequisite: Mathematics 400, or equivalent, and M. A. candidate

#### Education 504(540). Recreational and Activity Leadership

It is the aim of the course to furnish each student with practical skills that are of service in dealing with young people of high school age. The practical side is supplemented by a thorough consideration of source material and theory. A partial list of the areas covered in the course follows: How to organize and handle groups, the use of leaders from within the group, indoor games, outdoor games, special hikes, outdoor cooking, camp-fire leadership. Special field trips are provided to observe camps and playgrounds in operation.

Credit: 2 semester-hours

#### Education 505(552). The Two-Year College

This course is designed to acquaint the student with the history, purposes, patterns, and trends of the two-year college, including the junior college, the community college, and university extension centers.

Credit: 2 semester-hours

### Education 506 and 507. Teaching in the Two-Year College: Part I and Part II

These courses are designed to examine the instructional problems in public two-year colleges as they are affected by: the student population, the curriculum functions, the organization of the program, and the guidance responsibilities of the teacher. Field study visits to nearby two-year colleges are required.

Prerequisite: Education 505

Credit: 2 semester-hours each

### Education 508. Organization and Administration of the Public Two-Year College

This course deals with the organization and internal administrative structure of the various types of public two-year colleges. Topics considered include: purposes of the two-year college, district organization, finance, the college board of trustees, relationships of the college president to the board and the district, functions and duties of the various college administrative officers, and the faculty's role in administration.

Credit: 2 semester-hours

### Education 509 (500A). Basic Educational Concepts

This course deals with a study of those concepts or principles which have gradually emerged from the mass of educational theory, practice, and research to a point where they have been generally validated and accepted. Such a study is intended as a summarization

aimed at achieving a better perspective of the relationship of specific items to the total educational pattern.

Prerequisite: EDUCATION 510

Credit: 2 semester-hours

### Education 510(500D). Introduction to Educational Administration

This is the basic course in the organization and administration of the American school system at the national, state, intermediate, and local levels. The purposes and nature of school administration are studied. Other topics surveyed include: the superintendency, personnel problems, records and reports, plant administration, business administration, auxiliary services, administration of curriculum, instruction, guidance, and pupil personnel.

Credit: 2 semester-hours

#### Education 511. School Business Administration

Topics considered in this course include: the role of business administration in public education, office management, budgetary procedures, financial accounting, payroll administration, purchase and supply problems, insurance, debt service management, transportation, and food service.

Prerequisite: Education 510 or equivalent

Credit: 2 semester-hours

### Education 512(500F). School Community Relations

This course concerns the relation of the school to other educational efforts of the community. It considers the scope and types of agencies and informal influences of an educational nature, and also the agencies and methods by which the best total cooperative effort can be attained. It deals also with methods and plans of publicity. Constant reference throughout is made to New Jersey localities.

Prerequisite: Education 510 or equivalent

Credit: 2 semester-hours

### Education 514(506). School Law

After an introductory general study of such topics as: legal theory, the separation of school government from other local government, the appellate function of the State Commissioner of Education and the State Board of Education, the course is concerned principally with a study of New Jersey school laws (Title 18 of the Revised Statutes) and decisions. Students who have taken EDUCATION 500E.

School Administration II: Law and Finance, for credit are not permitted to take either EDUCATION 514 or EDUCATION 516.

Credit: 2 semester-hours

#### Education 516(507). School Finance

After an introductory unit concerned with the current economic environment, this course is devoted to a study of state and local taxation, state school-aid theory and practice, school-district indebtedness, cost-quality relationships, Federal aid, fiscal controls, and the budgetary process. Students who have taken Education 500E, School Administration II: Law and Finance, for credit are not permitted to take either Education 514 or Education 516.

Prerequisite: Education 510 or equivalent

Credit: 2 semester-hours

#### Education 519. Seminar in Educational Administration

This is an advanced course, taught by the case and other methods in which complex problems of education are considered.

Prerequisites: EDUCATION 510, 512, 520, 540, 580, and permis-

sion of the instructor

Credit: 2 semester-hours

### Education 520(502). Organization and Administration of the Modern High School

The following topics are considered: the student personnel, building and revising the high school curriculum, providing for individual differences, making the school schedule, records, the guidance program, pupil participation in government, the extra-curricular program, the health program, the safety program, discipline, library and study hall, cafeteria, the principal's office, and evaluating results.

Prerequisite: Education 510 or equivalent

Credit: 2 semester-hours

### Education 525(509). Secondary School Building Planning

This course deals with the education planning of secondary-school buildings. The preparation of educational specifications and space requirements is considered. Topics considered include the planning of offices, classrooms, auditoriums, gymnasiums, laboratories, shops, libraries, cafeterias, and other spaces.

Prerequisites: Education 520 and Education 530 or equivalents

### Education 529 (510). Seminar in Secondary School Administration and Supervision

In this course the class makes an intensive study of administrative and supervisory problems suggested by the educational events and trends of the year, by the interests and responsibilities of the members of the class, and by educational movements in New Jersey and the country. Each student does an individual piece of research which he reports to the class. This represents advanced work which depends upon previous study or experience in educational administration or supervision.

Prerequisites: Education 503, 520 and 540 or equivalents

Credit: 2 Semester-hours

### Education 530(504A). Curriculum Construction in the Secondary School

The purpose of this course is to consider the extent to which the secondary school curriculum meets the needs of a changing civilization, and to consider effective means of curriculum construction.

Prerequisite: Education 510 or equivalent

Credit: 2 Semester-hours

### Education 535(505). Organization and Administration of Extra-Curricular Activities

The first part of this course considers such general problems of extra-curricular activities as: their growing importance; their relation to the curriculum; the principles underlying their organization, administration, and supervision; and methods of financing. In the second part, an intensive study is made of the home room, the assembly, the student council, clubs, athletics, school publications, and other activities in which the class is especially interested.

Credit: 2 Semester-hours

### Education 538(548). Curriculum Construction in the Elementary School

This course offers an opportunity to review state and city elementary curricula: to discuss the principles of curriculum construction; to collect new teaching materials for the various subjects; and to evaluate, organize, and grade these materials. Teaching procedures in the use of materials are discussed and evaluated in terms of pupil needs, the objectives set up, and the results obtained. This course offers an opportunity to make a special study of the materials and procedures to be used in the supervision of the language arts.

### Education 539(504B). Seminar in Curriculum Organization

This course is for students actively engaged in problems of curriculum reconstruction and those who are anticipating committee work in this field. It concerns both the elementary and secondary levels. This represents advanced work which depends on previous study in the curriculum area.

Prerequisite: Education 503, 530, or 538

Credit: 2 Semester-hours

### Education 540 and 541(508). Supervision in the Secondary School, Part I and Part II

These courses emphasize the more practical phases of supervision which are met most frequently by those engaged in it. Among the topics are: organization for adequate supervision, supervision as encouraging and guiding the growth of teachers and the improvement of educational procedures, the supervisory functions of teachers' meetings, discussion groups, general and professional reading, the writing of articles, cooperative curriculum modification, utilization of community resources, and teacher intervisitation.

Credit: 2 semester-hours each

Pringriste: toutin 540 for 541
Education 550 (Eng. 547). Guiding the Reading Interests of

Education 550 (Eng. 547). Guiding the Reading Interests of Secondary School Students:

Part I. Materials and Sources

### Education 551. Guiding the Reading Interests of Secondary School Students: Part II. Needs and Services

The purpose of these courses is to prepare teachers to discover and improve the reading interests and attitudes of their students. Useful to all content area teachers and specialists who assign recreational and research reading, Part I particularly deals with fundamental bibliographical tools, the classroom teacher's relationship to the library, current source materials in book evaluation, and techniques for determining book selection. In Part II the teachers write their own book annotations and reviews, establish readability and suitability criteria based on a growing knowledge of child development, help build collections and services for young people which meet their personal needs through reading.

(Education 550 not open to those who have taken English 547; Education 551 may be taken as Part II after English 547.)

### Education 552 (556). Principles of Reading Improvement in the Secondary School

This is a course planned to present a deeper picture of the guiding principles and controversial issues which influence the teaching and learning of reading. Organized especially for the subject area teacher and the beginning reading specialist, recent non-clinical research and important professional and lay journals are studied to explore the pendulum of theory and practice in: the organization and administration of developmental reading programs, educational policies which affect reading, child development concepts and reading growth, systematic differentiation of individual needs, and reappraisal of the place of reading in our changing society. (Not open to those who have taken Education 556.)

Credit: 2 semester-hours

### Education 553 (430, 557). Techniques of Reading Improvement in the Secondary School

This is a practical course dealing with popular techniques useful in the improvement of non-clinical reading difficulties found in the content subjects. Planned especially for the subject area teacher and the beginning reading specialist, a study is made of secondary school reading needs, and specific suggestions are outlined for guiding the slow, average, and gifted student to success in reading up to his capacity in a classroom situation. Through an actual study of the more widely used reading workbooks, films, slides, tachistoscopic instruments, and texts available in the Reading Laboratory facilities, a practical approach is made to building a repertoire of reading skills in many areas.

(Not open to those who have taken Education 430 and Education 557.)

Credit: 2 semester-hours

### Education 554 (English 430). Case Studies of Reading Difficulties: Part I. Testing

### Education 555. Case Studies of Reading Difficulties: Part II. Reporting

These are the basic courses in learning to use diagnostic materials and learning to write up diagnostic findings. In Part I. after making a thorough study of the most frequently used current test instruments and inventories, each teacher applies this knowledge to the actual testing of a child with reading problems. Particular attention is given to the unique values of group and individual tests, survey and diagnostic

tests, and standardized and informal tests. In Part II the class learns to interpret test data. Practice in case reporting to parents, schools, and agencies is undertaken.

(EDUCATION 554 not open to those who have taken English 430; EDUCATION 555 may be taken as Part II after English 430.)

Credit: 2 semester-hours each

Education 556N(530A, 558). Corrective and Remedial Reading: Part I. Causation

### Education 557N(530B, 558). Corrective and Remedial Reading: Part II. Treatment

These are causation and treatment courses planned for the teacher and specialist who are involved in some aspect of remedial instruction in reading improvement. Part I offers an opportunity to extend training by investigation and interpretation of the more serious reading problems. A study is made of the constellation of causes of reading difficulties and techniques of remedial and corrective treatment are projected. In Part II particular attention is paid to the selection and adaptation of suitable improvement devices and curriculum materials. Illustrative cases are drawn from actual clinical experiences by requiring participation in the program of the Reading Laboratory.

(EDUCATION 556N not open to those who have taken EDUCATION 530A and EDUCATION 558; EDUCATION 557N not open to those who have taken EDUCATION 530B and EDUCATION 559.)

Prerequisite: Permission is needed to take these courses

Credit: 2 semester-hours each

### Education 560 (500B). Advanced Educational Psychology.

The course covers the various aspects of growth. Individual differences, their measurement, and their bearing on educational practices and principles furnish topics of study and discussion. Principles and laws of learning are reviewed. Some time is given to problems of personality as encountered in school work. The several points of view which have been prominent in the psychology of the past fifty to seventy-five years are examined for their contributions to thinking about human nature.

Prerequisite: An introductory course in psychology

### Education 561 (550). Child and Adolescent Development

This course reviews the general characteristics of child and adolescent development: motor and physiological, social, emotional, language, intellectual, and interests and ideals. The influences of home, school, community, and institutional life on child and adolescent development are considered as well as problems of guidance presented by children in the normal course of development and also those presented by deviations from the normal course.

Credit: 2 semester-hours

### Education 562(520). Principles of Mental Hygiene

This course is designed to be a general survey of the principles and practices of mental health with special reference to the mental health of teacher and pupil. It involves a thorough grounding in fundamental principles of mental hygiene with much practical consideration of the mental health values of instructional programs and procedures. Discussion centers on practical efforts to develop wholesome personalities in our schools.

Credit: 2 semester-hours

### Education 564(554A). Psychology and Education of Exceptional Children: Physical and Mental

This course surveys current practices and problems in the education of children with physical and mental handicaps, and of gifted children. It is designed for teachers, counselors, supervisors, and administrators who may work with one or more such children or who may wish to prepare for school and community leadership in developing facilities for exceptional children.

Prerequisite: A course in child and adolescent psychology

Credit: 2 semester-hours

### Education 565(554B). Psychology and Education of Exceptional Children: Social and Emotional

This course surveys current practices and problems in the education of socially and emotionally handicapped children. It is designed for teachers, counselors, supervisors, and administrators who may work with one or more such children or who may wish to prepare for school and community leadership in developing facilities for exceptional children.

Prerequisite: A course in child and adolescent psychology

Education 566. Psychology and Education of the Gifted

This course is designed to present a complete picture of the bright and gifted young people in contemporary American life. It surveys the various practices involved in their education, as well as the psychological characteristics of this group and socio-emotional development. It is designed for teachers, counselors and administrators, and is conducted on an advanced level, allowing sufficient time for seminar discussions in addition to lectures.

Credit: 2 semester-hours

### Education 567(521A). Educational and Psychological Measurement in Guidance

This course deals with fundamentals of educational and psychological measurements in guidance: test theory, statistical concepts, test construction, evaluation, and interpretation. The place of tests in the instructional program is stressed.

Prerequisite: This course is open only to those with teaching experience

Credit: 2 semester-hours

### Education 568(521B). Psychological Tests in Guidance Programs

This course is designed to familiarize the student with various psychological tests and scales that may be used in guidance programs in the secondary school. The student is given practice in administering many types of group tests. This includes scoring the tests and evaluating the results, with a discussion of ways in which these results may be used. Much time is spent in actual laboratory demonstrations of tests, giving students an opportunity to serve as subjects and as examiners. Class discussion is based upon first-hand information gained through use of the tests, on readings, and on class reports.

Prerequisite: Education 567 (521A)

Credit: 2 semester-hours

Education 573(560A). Production of Audio-Visual Instructional Materials:

and Part I, Non-Projected Materials
Education 574(560B). Production of Audio-Visual Instructional Materials:

Part II, Projected and Audio Materials
These two courses combine laboratory and seminar experiences in
the organization and preparation of instructional materials for classroom use. They are intended for teachers, administrators, and audio-

visual specialists who wish to develop ability to plan and produce audio-visual materials for instructional purposes. Students have opportunities to prepare pictures, slides, transparencies, displays, models, graphs, magnetic tapes, motion picture segments, and instructional television programs according to their interests and needs.

Part I deals with non-projected materials, such as drawings, charts and graphs, bulletin boards, feltboards, maps, demonstrations, exhibits

and displays, dioramas, etc.

Part II includes production of projected and audio materials, such as slides, filmstrips, opaques, transparencies, magnetic tapes, motion pictures, television programs, etc.

These courses meet for three clock hours per week, since they in-

volve primarily laboratory experiences.

Prerequisite: Education 408. Selection and Utilization

of Audio-Visual Materials

Credit: 2 semester-hours each

### Education 580(551). Principles and Techniques of Guidance

Topics included in this course cover: philosophy of guidance, history of the guidance movement, the need for guidance presented by children and adolescents. The methods of gathering useful data are studied, and school records, exploratory activities, tests, inventories, the case study approach, occupational information, and occupational data are treated as well as general methods of guidance with special stress on interviewing and counseling of students.

Credit: 2 semester-hours

### Education 581 (534). Community Resources for Guidance

This course deals with the various agencies, industries, and institutions available in the surrounding communities for use in guiding students. In addition to becoming familiar with the location and nature of these facilities students learn the techniques for arranging student interviews and visits. Class discussion and personal research are supplemented by field trips.

Prerequisite: Education 580

Credit: 2 semester-hours

### Education 582(535). Vocational Guidance

This course is intended for counselors in the junior and senior high schools to obtain information about the principles and philosophy of vocational education and the techniques of counseling youths who wish to receive pre-employment training, and for counselors of outof-school groups who are attempting to make readjustments to occupational life. Attention is also given to guidance techniques for job preparation and readjustment, the matching of educational and personal abilities to job specifications, the effects of social legislation on the employment of youths, and a study of techniques used in determining occupational needs and occupational changes.

Prerequisite: Education 580

Credit: 2 semester-hours

#### Education 583(536). Educational Guidance

This course is concerned with the facilities available for education after high-school graduation, the problem of further training for pupils leaving school before completing high school, and the academic problems of students while in school. A brief survey of colleges and college-admission procedures is made.

Prerequisite: Education 580

Credit: 2 semester-hours

### Education 584(537). Social-Moral Guidance

This course is concerned with the non-vocational and non-academic personal and social problems of pupils as well as with the development of techniques by which counselors can integrate the pupil's personal life with the mores and customs of society. It also includes a study of the possible services of various community agencies and a study of the counselor's relation to problems of discipline and citizenship education.

Prerequisite: Education 580

Credit: 2 semester-hours

### Education 585 (538). Group Guidance and Counseling Activities

This course is concerned with the various techniques for helping individual pupils and for using group activities including role-playing as a guidance technique. The group activities considered include those of home rooms, activity periods, occupation courses, student field trips, placement follow-ups, college nights, and career days.

Prerequisite: EDUCATION 580

Credit: 2 semester-hours

### Education 586(539). Elementary School Guidance Services

This course is designed for guidance counselors in the public schools with particular emphasis on the guidance services that may be

offered in grades kindergarten through six. The guidance program, as established in the public schools, envisions supervision and administration of the guidance program from the kindergarten through graduation at grade twelve. It is important, therefore, that the guidance director understands the services that can be made available to the elementary school.

Prerequisite: Education 580

Credit: 2 semester-hours

### Education 587. Administration and Supervision of Guidance Programs

This course is designed to acquaint the student with more complex aspects of the supervision and administration of a guidance program. It includes such topics as: developing and administering programs of student registration (course selection); theory and techniques of scheduling a modern high school; supervisory responsibilities of the director of guidance within and outside of the department; coordinating guidance activities in a multi-school district, etc. In general, this course is aimed at providing essential background for counselors desiring to establish or administer a guidance program in a high school or a multi-school system.

The primary method of study is the examination and evaluation of current guidance practices leading to the formation of proposals for improvement, and possible inclusion, in guidance programs where the student is working as a counselor and/or a director.

Prerequisites: Education 580 and 6 semester-hours credit in Area 3 of the Personnel and Guidance Master's degree program

Credit: 2 semester-hours

### Education 588. Techniques of Interviewing and Counseling

This is an advanced techniques course in the counseling of individual students. The directive, non-directive, client-centered, and role playing approaches, as well as the case study methods are studied. Opportunity for demonstration and practice with these techniques are implemented with tape recordings, one way screens, and closed-circuit television.

Prerequisites: Twelve semester-hours of work in the Personnel and Guidance graduate program and permission of the faculty adviser

### Education 589. Student Personnel Services in Higher Education

This course is a study of the student personnel functions in twoyear and four-year colleges. The areas to be included are: personal counseling, financial aid, dormitory management, health program, student activities and social programs; course selection, job placement, college admission and academic retention, administration and supervision of the program.

Credit: 2 semester-hours

### Education 601. Workshop in Education

Section A — Administration

Section B — Supervision Section C — Curriculum

Section D — Guidance

Section E - Psychology

The workshop course enables the graduate student to devote his time to an educational topic or school problem of current interest to him and to secure the help of the staff, fellow students, and college facilities in pursuing this study. Members of the workshop may meet together to discuss matters of common concern in respect to the current school situation. In addition, the student works independently on his own subject and at times meets with a small group interested in the same area.

In the past, students have worked on topics in such areas as these: problems in administration, guidance programs, extra-curricular activities, school philosophies, problems in supervision, curriculum planning, and community relations. The success of the workshop depends much upon the student knowing what he wants to accomplish; the procedure being flexible enough to support his purposes. He must have his proposed problems for study approved by the Director of the Workshop before he enrolls for the course.

The workshop is divided into five sections, as noted above. The student may enroll for four semester-hours of credit or for two, the four calling for two periods of scheduled time in the course daily, the two calling for one period of scheduled time in the course. The student taking the course for two credits enrolls for one of the five fields. The student taking it for four credits may do all the work in one of these five fields, or he may enroll for two hours of credit in one and two in another.

#### Education 602. Research Seminar in Guidance

This course is designed to provide a laboratory situation for the exploration and study of the present practices with respect to the three major phases of the guidance program. Usually this seminar is given in conjunction with either Vocational (Education 582), Educational (Education 583), or Social-Moral (Education 584) Guidance. The major portion of the time is spent on field trips, in private investigation, and in research.

Prerequisites: Education 580, 503, and 10 semester-hours credit

in areas 2 or 3 of the M. A. degree program in

Personnel and Guidance

Credit: 4 semester-hours

### Education 603(603B). Principles and Practices of Research

The purpose of this course is to give students an opportunity to complete research begun in Education 503; to collect, analyze, and interpret the data; to state the findings; to draw conclusions and generalizations; to write the research report together with an abstract; to give an oral report of the investigation before a committee of the faculty.

Prerequisite: Education 503

Credit: 2 semester-hours

### Education 604(529). Field Work in Guidance

The aim of the course is to introduce the student to various aspects of guidance through experience in agencies actually dealing with such problems. Students observe and participate in activities of the agencies to which they are assigned and write full accounts of these observations and experiences. Some time is spent in discussing and evaluating these experiences and relating them to the literature of the subject. Prerequisites are: experience in teaching, familiarity with the literature on all aspects of guidance and mental hygiene, and Education 560, 562, and 580. This work is conducted by seminar and individual guidance. The hours for the conferences are arranged personally by student and instructor.

Credit: 4 semester-hours

### Education 606. Practicum in Guidance Services

This course is designed to be a final summation of the counselor's preparation. It includes: investigation of programs in practice; de-

velopment of guidance programs to meet specific school needs; evaluation of student personnel services.

Prerequisite: Completion of a minimum of 20 semester-hours in

the Personnel and Guidance program

Credit: 2 or 4 semester-hours

#### SENIOR-GRADUATE COURSES

Most of the following courses are set up to serve graduate students as well as College seniors. To carry graduate credit, the course in question must be approved by the candidate's advisor. In all instances, Education 406, Education 409, and Education 410 will be accepted as work for either of the two graduate degrees in this department.

### Education 404. Cocurricular Activities in the Secondary School

This course is designed as an introduction to that part of the total school program falling outside of the area of regularly scheduled classes. A study is made of the role of the faculty advisor. The more usual cocurricular activities are considered.

Credit: 3 semester-hours

### Education 405. Teaching the Block-of-Time Program in the Secondary School

Following a study of the philosophical and psychological bases of the block-of-time program, major emphasis is placed on the methodological problems involved in teaching the program and the development of resource units for use at different levels.

This course is open only to those students who have a major-minor combination of English and social studies.

Credit: 3 semester-hours

### Education 406. Educational Sociology

This course deals with the application of sociological principles to educational problems. The school is treated as a part of the community, and the various social forces that affect the school and its administration are considered. The following topics are included: family backgrounds, community organization, social breakdown, social mobility, socialized classroom methods, and the social approach to individual behavior difficulties.

### Education 408. Selection and Utilization of Audio-Visual Materials

Sources, selection, and evaluation of audio-visual aids are studied in this course. Techniques in developing individual reference catalogs of audio-visual aids are stressed. The production of school-made aids is also an important aspect of the course. The use of the latest audio-visual equipment is demonstrated.

Credit: 2 semester-hours

### Education 409. Radio and Sound Equipment in the Classroom

This course trains teachers and school executives in the use of radio programs, amplifying systems, recording equipment, and record players. Actual practice is given in the use of these educational aids. Problems of script-writing, microphone and recording techniques, and program directing are considered. The class visits radio stations for equipment and program observation. Each student develops a teaching unit using radio or sound equipment to vary, vitalize, and improve educational practices.

Credit: 2 semester-hours

#### Education 410. Teaching Materials Workshop

This course is for those persons who wish to study advance problems in the utilization and administration of audio-visual materials. Individual research is stressed, and there is an opportunity to work out individual projects. Such problems as budget requirements, administrative set-up, establishment of film libraries, etc., are emphasized. It is assumed that the student will have taken Education 408 or will have had the equivalent in practical experiences.

Credit: 2 semester-hours

### Education 411. Educational Motion-Picture Workshop

This course includes various phases of the planning and production of educational motion pictures. Students receive actual experience in scenario writing, costume research, set designing, lighting, photography, editing, and sound recording. During the course an educational film is produced as a class project.

Credit: 2 semester-hours

### Education 415. Seminar in the Problems of a Classroom Teacher

This seminar deals with the problems commonly encountered by beginning teachers. It considers problems of classroom management, student behavior, teaching methods, teaching materials, curriculum adaptations, and the relation of the teacher to the total school community. It provides each student with an opportunity to analyze, evaluate and discuss student-teaching experiences. It makes provision for planning the student's approaching employment as a teacher.

Credit: 3 semester-hours

### Education 420A and 420B. The Community Centered School

This course deals with the development and functions of the school as a community resource. Students assemble and interpret data relating to actual school and neighborhood situations. Consideration is given to the social framework in which the school operates; racial and national minorities; intercultural education; truancy and delinquency; and the discovery and utilization of community resources. The use of school personnel and facilities to deal with racial problems is treated in light of the data assembled.

Credit: 2 semester-hours each

#### Education 440. Camping and Outdoor Education

The purpose of this course is to familiarize the students with camping and outdoor education as educational methods utilized by the schools of America. The aims and methods of camping are studied, and consideration is given to the communities that have active camping and outdoor education programs in operation. The course also helps prepare the student for a position in summer camps. This course is usually given at the New Jersey State School of Conservation, Stokes State Forest.

Credit: 2 semester-hours

### Education 441. Conservation Education

This course is designed to give teachers and prospective teachers a background for organizing and teaching conservation on various grade levels. The need for conservation, the various kinds of natural resources, and some of the modern methods for using and renewing these resources are considered. Field trips, laboratory experiencs, visual aids, printed materials, and visiting specialists combine to make this a useful introductory course for all teachers.

Credit: 2 semester-hours

### Education 442. Practicum in Camp Leadership

In this course the student has an opportunity to learn the techniques of camp leadership through practical experience, guided group study, and discussion. The practical experience comes through serving as a camp counselor in an actual camp situation. During this practical experience there are regular discussion sessions and assigned

readings which help the student to gain a background of knowledge to help deal with the practical problems as they arise.

Credit: 2 semester-hours

#### Education 444. Practicum in Conservation Education

This course is designed to provide teachers and supervisors with a background of experience and knowledge which will enable them to organize and to conduct conservation education programs in their own communities. Using an extensive library of conservation educational material, students formulate teaching units, lists of teaching aids, and projects suitable for use in their own communities. Participating in conservation projects with the children in the demonstration camp furnishes a practical background for research and discussion.

Prerequisite: Education 441, Conservation Education, of Science 412, Field Studies in Science: Biological, or Science 413, Field Studies in Science: Physical,

or the equivalent

Credit: 2 semester-hours

### Education 450. Psychological Foundations of Personality

This course is concerned with the physical, mental, and cultural factors influencing personality development. Such topics as the nature of personality, mental health and patterns of deviation, and evaluation, are considered.

Credit: 3 semester-hours

### Education 451. Guidance for the Classroom Teacher

This course is designed as an introduction to the field of guidance for teachers who are concerned with problems of guidance and human relations in the classroom. This course is also designed to give the new teacher a picture of the place of guidance in the modern school, to indicate what guidance is and what is not, to indicate the techniques by which guidance is accomplished, and to identify some of the tools of the guidance counselor.

Credit: 3 semester-hours

### Education 452. Psychology and Education of the Handicapped

This course is for the preparation of teachers of handicapped children and youth. It orients prospective teachers of regular classes to the special needs of those with handicaps of sensory, motor, intellectual, emotional, and neurological origins. Both the theoretical psychological aspects and the practical applications to the classroom are studied. The course includes analysis of case material.

#### Education 453. Social Psychology

This course focuses on the social behavior of the individual and the group. Attention is given to social perception, motivation, and learning; attitudes and values; the development and dynamics of social groups; intergroup tension and prejudice; and psychological approaches to public issues.

Credit: 3 semester-hours

### Education 461. The Junior High School Curriculum

Recent trends in the development of the junior high school curriculum and the relation of the curriculum to the aims, function, and organization of the junior high school are covered. Curriculum patterns in representative junior high schools are studied and evaluated. An opportunity is given to each student to develop units of work for junior high school subjects in the major of his choice.

Credit: 3 semester-hours

### Education 462. Survey of Reading Methods in Secondary School Subjects

Planned especially for the inexperienced teacher in all subject matter areas, this introductory course outlines the role good reading plays in achieving both academic and personal success in every aspect of school life. New teachers will want an overview of: the physiological, psychological, and sociological factors in reading; resources available to the reading-minded teacher; and the school's responsibility for helping the student build an inventory of reading skills by utilizing reading opportunities in the entire curriculum.

Credit: 3 semester-hours

### Education 463. Reading and the Improvement of Study Skills

This is a course in "How to Study" designed to prepare teachers to help junior-senior high school students to achieve greater effectiveness in their reading-study habits. After examination of recent materials and research, the class develops a series of practical methods for teaching and learning: the SQ3R approach, the best methods for taking examinations, the application of reading to problem solving, the development of memory and concentration, and the various techniques for taking and organizing reading notes, and the reading of homework assignments. (Not open to those who have taken Education 530C.)

#### Education 464. Foundations of Reading Instruction

Good first teaching of reading is of primary importance in the sequential development of reading skills which extend into the junior and senior high school. In this course methods and materials currently in use in elementary reading programs are studied with a view toward increasing the power of both the teacher and the learner. How the reading process begins, and how it is reinforced are topics fundamental to all upper grade teachers who are faced with the problem of continuing reading skills development in all curriculum areas. (Not open to those who have taken Education 532.)

Credit: 3 semester-hours

### Education 465. College Reading and Study Improvement Laboratory

This workshop course is designed for those college students who feel that reading-study problems are interfering with their normal school progress. Students engage in supervised practice experiences which promote vocabulary growth, more flexible reading speeds, comprehension and recall improvement, skimming competency, and better interpretative and critical reading techniques. Particular attention is given to reviewing for examinations, keeping up with daily reading assignments, taking notes, and organizing the reading content into main and sub-topic structure. Students may volunteer for this course or be recommended by a faculty member.

Credit: 3 semester-hours

### Education 480. Field Science for Elementary Teachers

Working in a natural setting, rather than an artificial laboratory, this course stresses firsthand experience with natural phenomena and suggests what can be done to convey an understanding of these things to the elementary school student. In developing an understanding of natural resources consideration is given to such areas as rocks and minerals, plant and animal life, astronomy, weather, and all outdoor phenomena, both physical and biological. If desired, collections are made under supervision, and some latitude is provided for individual specialization in some phase of field science. The student needs no formal scientific background for this course. Methods of teaching on the elementary school level as well as subject-matter content are included. Simple demonstrations, experiments, collections, acquisition of free and inexpensive materials, reference publications, and the most recent methods and trends in field trip procedure are considered.

### Education 491. Measurement and Evaluation in Teaching and Learning

This introductory course deals with teacher-made tests, standardized tests, and other devices for measuring and evaluating achievement, intelligence, aptitudes, social relationships, and personal-social adjustment. Instruction and practice are given in diagnosing disabilities in subject-matter areas and in appraising, marking, and reporting pupil progress. The student constructs, uses, and evaluates teacher-made tests, selects and administers standardized tests, handles test scores, and interprets test data.

Credit: 3 semester-hours

#### Education 492. Comparative Education

The educational systems of Europe, Asia, Africa, and Latin America are studied in an attempt to gain insight into the essential qualities of American education. In this process the relationship between the educational system of each culture and its history, economy, and political and social organization should emerge. Factors causing progress and change in education since 1900 are observed.

#### THE DEPARTMENT OF ENGLISH

Graduate study in the Department of English is designed:

- 1. To broaden the understanding and appreciation of the culture of the Western World through extended study of the literature of Great Britain and the United States, of those European nations which have contributed much to our American heritage, and of those Oriental and other nations now exerting an increasing influence upon the modern world.
- 2. To examine the function of English language communication in the modern world through study of its historical development, its psychological nature, its critical expression, and its practice in the language arts.
- 3. To enrich the professional background of English teachers through investigation of research and experimentation designed to improve instruction in English in the secondary school.

Requirements for Graduate Study in the English Department

The candidate for the Master's degree must present an undergraduate major of at least twenty-four semester hours in English or complete the required number with prerequisite courses prescribed by the Chairman of the Department before matriculation.

Upon matriculation each candidate receives from the Chairman of the Department an approved course outline distributed as follows:

- I. Basic Professional Education 6 semester-hours
  These courses include a full year of research as prescribed in
  Education 503 and Education 603 or the equivalent of Education 603 in a departmental seminar such as English 507,
  516, 517, 519, or 541, when these courses are given. Students
  selecting an English seminar must present Education 503 as
  a prerequisite.
- II. Departmental Course Requirements
  - A. American Literature ..... Minimum requirements
    4 semester-hours

To be selected from among English 406, 407, 413, 421, 443, 525, 533, 537, 538, 543, 545A, 545B.

B. English Literature Minimum requirements
6 semester-hours

To be selected from among English 402, 404, 406, 407, 413, 421, 443, 502, 503, 505, 506, 515, 518, 521, 531, 532, 535, 544A, 544B.

C. World Literature ...... Minimum requirements
4 semester-hours

To be selected from among English 421, 428, 532, 451, 452, 513, 514, 520A, 520B, 528, 530, 534, 536, 539, or 548.

- D. Language Communication . . . . . Minimum requirements
  4 semester-hours
  - 1. Language Study
    To be selected from among English 408, 419, 428, 511, 512, or 516.
  - \*2. Reading Improvement

    To be selected from among Education 550, 551, 552,

    553.
  - \*3. Speech
    To be selected from among Speech 410, 435, 448, 449, 454, 456, 461A, 461B, 462, 463, 464, 466, 467, 468, or 522.

### III. Department Examination or Master's Thesis

Each candidate must pass a written comprehensive examination before the degree is awarded. A part of this examination is a brief oral examination conducted by members of the Graduate Faculty of the Department. The Chairman of the Department announces to the Registrar as well as to members of the Department the date of the examination which will be given in April of each calendar year and will provide candidates with the information desired to prepare for it. This comprehensive examination embraces all the areas in the departmental course requirements. Ample choice is given, so that the student will be able to answer in terms of whatever complement of courses he has taken. It assures that the candidate has wide interests in read-

<sup>\*</sup>A course in reading improvement or speech may be offered as two of the semester-hours required in the area of language communication.

ing, cultural pursuits, and professional trends and developments.

If a candidate with an outstanding record wishes to evolve a research project in English developed in EDUCATION 503 and 603 into a thesis (Graduate 600), a departmental sponsor will be appointed, if schedule permits such an appointment. The "Regulations of Research and Thesis Requirements" will be followed in the completion and acceptance of the thesis.

Otherwise, each candidate must pass a written comprehensive examination before the degree is awarded.

#### GRADUATE COURSES

### English 502. Victorian Poetry

The most important English poets who wrote during the transition from the Victorian to the modern period are read, analyzed, and discussed: Rossetti, Swinburne, Hardy, Bridges, G. M. Hopkins, Frances Thompson, A. E. Housman, Kipling, and Yeats.

Credit: 2 semester-hours

### English 503. Geoffrey Chaucer and His Times

Some of the works of Chaucer are studied intensively, while others are read rapidly, so that the student may acquire a broad general understanding of Chaucer's place in the history of English literature as well as facility in reading and interpreting the medieval text.

Credit: 2 semester-hours

### English 505. Philosophy and British Poetry of the Nineteenth Century

This course is designed to show the mutual interrelations between currents of philosophic thinking and their influence in selected writings of major poets from Wordsworth to Matthew Arnold.

Credit: 2 semester-hours

### English 506. John Milton

The understanding and evaluation of Milton's poems are primary aims: Contributory are the following: Milton's literary heritage and influence, his position of leadership in the Puritan struggle for civil and religious liberty as revealed in his prose writings, and biographical materials.

#### English 507. Critical Writing

This course is primarily an examination of critical articles relating to major literary figures. Besides reacting to these examples of literary opinion and scholarship, students are asked to develop a consistent set of critical principles and to apply these to the work of some outstanding author.

Prerequisite: Education 503, when course is used as substitute for Education 603

Credit: 2 semester-hours

#### English 511. The History of Literary Criticism

Great critics from Aristotle to I. A. Richards and T. S. Eliot are reviewed. Four major critical orientations are explored to bring modern criticism into focus.

Credit: 2 semester-hours

### English 512. The Growth and Structure of the English Language

Concerned with the historical background necessary for an understanding of the English language as it is spoken and written today, the course emphasizes the following areas of study: the nature and origin of language; the ancestry of English; the early growth of English; sources of the vocabulary and the making of words; changing meanings and values of words; syntax and usage; concern with dictionaries, spelling, pronunciation, variations, and standards in the modern period.

Credit: 2 semester-hours

### English 513. The Renaissance

This course deals with Petrach and the Humanists; Boccaccio and the Novelle; Machiavelli and The Prince; Cellini and the Autobiography; Castiglione and The Courtier; Boiardo, Pulci, Ariosto, and the romantic epic; the drama; Rabelais and Gargantua and Pantagruel; Ronsard and the French Pleiade; Cervantes and Don Quixote; the art of DaVinci, Botticelli, Michelangelo, Raphael, Titian, and others; and the House of the Medici, Savonarola, the Popes.

### English 514. Origin and Development of the Arthurian Legend

This course deals with the vague and tentative beginnings of the Arthur story in early chronicle legend; with Geoffrey of Monmouth's pseudo-historical and Chretian de Troyes's romantic treatments; with the great medieval recapitulations of Gottfried von Strassburg. Wolfram von Eschenbach, and Sir Thomas Malory; with the Victorian retellings of Tennyson, Arnold, and Morris; with the musical adaptations of Wagner; and with the modern versions of E. A. Robinson. It includes a detailed history of the development of the legend in its divers forms.

Credit: 2 semester-hours

#### English 515. Robert Browning

Browning's characteristic shorter poems are recalled or studied in order to define his fundamental ideas as a writer. This study is followed by a study of his longer poems and dramas, the "soul-studies," and Browning's masterpiece, *The Ring and the Book*. These works are studied to illustrate the development of Browning as man, poet, and philosopher, and a reflection of certain phases of Nineteenth-Century life and thought.

Credit: 2 semester-hours

### English 516. Language Problems in the English Curriculum

The purpose of this course is to enrich the student's sensitivity to and understanding of language. Theories of language and the cultural histories of words are reviewed and applied to the problems of reading, composition, and speech. The course is conducted as a seminar.

Prerequisite: Education 503, when course is used as substitute for Education 603

Credit: 2 semester-hours

### English 517. Recent Research and Experiment in the Teaching of English

Recent experiments in methods of teaching English, and current research in the fields of language, literature. and composition are examined and evaluated. The purpose of this examination is to throw light on problems of teaching English in the secondary school, and to indicate the helpfulness of trends and developments.

Prerequisite: Education 503, when course is used as substitute

for Education 603

#### English 518. The Major Romantic Poets

The poems of Wordsworth, Coleridge, Byron, Shelley, and Keats are emphasized. Pre-Romantics — Blake, Burns, and Scott — and minor Romantics are considered. Poetic theory as enunciated by the poets themselves is studied.

Credit: 2 semester-hours

### English 519. English in the Modern High School

This seminar considers the methods and materials requisite to the development of a program in the language arts (listening, speaking, reading, and writing). The course is accepted for certification by the State Department of Education. The text is Bulletin No. 17 of the State Department, Growth in Language From Kindergarten Through High School.

Prerequisite: Education 503, when course is used as substitute for Education 603

Credit: 2 semester-hours

#### English 520A and 520B. Great Books on Education

Students examine the classics dealing with educational theory and practice which they so often read about but rarely consult.

Part A deals with Plato's Republic, Xenophon's Cyropaedia, Cicero's De Oratore, Castiglione's The Courtier, Machiavelli's Prince, Rabelais's Abbey of Theleme, Ascham's Schoolmaster, Bacon's Novum Organum, Defoe's Projects, Milton's To Samuel Hartlit on Education.

Part B deals with Rousseau's *Emile*, Byron's *Don Juan*, Hughes' *Tom Brown's Schooldays*, Newman's *Idea of a University*, the Arnold-Huxley debates, and the works of John Dewey and Jacques Barzun.

This course is recommended for graduate students in the Department of Education.

Credit: 2 semester-hours each

### English 521. English Literature of Social Problems

Social problems implicit in all literature are considered. Special emphasis is placed on authors who were keenly aware of the social implications of their work. Langland, Chaucer, Shakespeare, Jonson, Milton, Swift, Fielding, Smollett, Dickens, Carlyle, Galsworthy, Wells, and Shaw are among the writers read and discussed.

Credit: 2 semester-hours

### English 525. The Development of the American Novel

The American novel from 1789 to the present is examined. Beginning with the novels of the early Nineteenth Century, the course

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traces the rise and development of the Romantic and Realistic novel and concludes with an example of American Naturalism. Written criticism of five novels is required of candidates for the A. M. degree.

Credit: 2 semester-hours

(1.)

## English 528. New Perspectives in World Literature

Literatures of the Orient, the Middle East, Africa, and South America are read and interpreted in relating to Western World Literature to create a world perspective through understanding of the interrelations of literature.

Credit: 2 semester-hours

## English 530. Dante and His Influence in England and America

Fully two-thirds of this course is devoted to rereading and reassessment of Dante in English translation. When Dante's meaning has been revealed, his continued influence from Chaucer through Sackville, Spenser, and Milton to Rosetti, Longfellow, and T. S. Eliot becomes the subject of investigation.

Credit: 2 semester-hours

## English 531. Seventeenth Century English Literature

The style and content of such prose writers as Bacon. Burton. Walton, Hobbes, Bunyan, Perys, and Dryden are investigated. Similarly, the poetic expression of experience in Donne, Jonson. Herbert, Herrick, Cowley, Vaughan, Suckling, Lovelace. Waller, and others is studied.

Credit: 2 semester-hours

## English 532. The Victorian Novel

The novel of Victorian England is studied intensively. A review of the development of the English novel before this period is followed by studies in the works of Dickens, Thackeray, Eliot, Trollope. Meredith, and Hardy. Special attention will be given to novels suitable for high school study.

Credit: 2 semester-hours

# English 533. Masters of American Literature

Significant American writers, such as Irving. Hawthorne. Poe. Emerson, Melville, Whitman, and Mark Twain, are studied to discover their contributions to American life and to reveal important forces in our national background.

## English 534. Medieval Epic, Saga, and Romance

The chief medieval epics, sagas, and romances translated into modern English from the literatures of England, France, Germany, Ireland, Iceland, Wales, and Italy are reviewed. Attention is given both to those narratives which reflect the life of a particular country and to those which are international and express more generally the spirit of medieval Europe.

Credit: 2 semester-hours

## English 535. Eighteenth Century English Literature

Major essayists, poets, dramatists, novelists, and letter writers are read and evaluated in terms of the thought, life, and literary movements of their own time and in terms of their significance for the present generation. Authors studied include Addison, Steele, Defoe, Swift, Goldsmith, Sheridan, Gray, Johnson, Boswell, Cowper, Richardson, Fielding, Sterne, Smollett, and Gibbon.

Credit: 2 semester-hours

# English 536. Philosophy in Great Literature

The study of a few masters of literature, such as Dostoievski, Tolstoy, Mann, Proust, aims at giving the student a deeper insight into the life-views and world-views which have shaped the consciousness of modern Western man.

Credit: 2 semester-hours

# English 537. American Drama in American Democracy

Plays produced on the American stage from Colonial to contemporary times are read and studied to illustrate the development of democratic concepts.

Credit: 2 semester-hours

## English 538. American Literature of Social Problems

American literature reflecting social problems from 1800 to 1914 is surveyed to discover the attitudes of various authors toward these problems. Such authors as Cooper, Lowell. Thoreau, Whitman, Howells, Bellamy, Garland, and Glascow are studied from this point of view.

## English 539. Theater and Society

Dramatic expression from ancient Greece to the present is studied to observe and appreciate social, political, and ethical trends reflected in the drama. Social trends in contemporary drama receive special attention.

A course in Drama is a prerequisite.

Credit: 2 semester-hours

## English 541. The Teaching and Appreciation of Poetry

Appreciation of poetry as an expression of life and as a form of art is emphasized. The aims and methods of teaching poetry are considered in detail.

Prerequisite: Education 503, when course is used as substitute

for Education 603

Credit: 2 semester-hours

## English 543. Contemporary American Literature

Major authors and literary movements in contemporary America are studied. Writers of prose, poetry, and drama are included.

Credit: 2 semester-hours

## English 544A and 544B. Shakespeare

Part A deals with the tragedies. Shakespeare's development as a writer of tragedy, his concept of the tragic, and the diversity of characters who embody this concept are studied in the light of critical traditions and the history of Shakespearean stage production.

Part B deals with the comedies. Shakespeare's development as a writer of comedy, his masterful understanding of the large function of comedy, and the variety of situations and characters exhibiting this function are critically studied.

The tragic and comic aspects of the chronicle plays are woven into the discussion. Both parts provide a complete understanding of Shakespeare's full development.

Credit: 2 semester-hours each

## English 545A and 545B. American Literature

In Part A, the interplay of life and letters of early America is surveyed chronologically. Emphasis is placed on the political, social, and ethical motivations of such authors as Bradford, Taylor, Franklin, Edwards, Freneau, Irving, Cooper, Bryant, Poe, Emerson, Thoreau, Hawthorne, Longfellow, Lowell, Melville, and Whitman.

In Part B, the growth of the democratic tradition in America is pinpointed through a study of such authors as Dickinson. Twain, James, Howells, Crane, Dreiser, O'Neill, Frost, Robinson, Anderson, Fitzgerald, Hemingway, and Faulkner.

Credit: 2 semester-hours each

## English 548. Fiction as an Image of World History

A sequence of historical and cultural novels is presented to give insight into the epochs involved. Great historical novels pertaining to Hebrew, Egyptian, Greek, Roman, Medieval, Renaissance, and modern times are discussed.

Credit: 2 semester-hours

### SENIOR-GRADUATE COURSES

For more complete descriptions of these courses see the undergraduate catalog.

## English 402. Survey of British Literature to 1798

All forms of British literature, except drama and fiction, from the beginnings to the triumph of romanticism in 1798, are systematically surveyed. Chronology, development, and the transmission of influences and traditions through the centuries are studied.

Credit: 3 semester-hours

# English 404. Survey of British Literature

British literature from 1798 to the present is surveyed.

Prerequisite: English 402

Credit: 2 semester-hours

## English 406. The Modern Novel

British and American novels of the twentieth century are reviewed. Critical attention is directed toward political, social, and literary values in selected novels. Students are taught how to read a novel with profit, and how to direct the reading of others.

Credit: 2 semester-hours

## English 407. Biography: Its Form and Function

Selected biographical writings, including autobiography, diary, and memoirs, from medieval England to contemporary American Pulitzer Prize biographies, are examined. Study emphasizes both changing concepts of the form and also revelations of the nature, character, and varied destinies of human personality.

## English 408. Creative Writing

Each student is assisted in finding his own best field of writing, and is given further training in that field. The course is based entirely upon needs of the class as revealed in student-writing. Much time is devoted to criticism and discussion of mutual problems. Methods of teaching creative writing are considered.

Credit: 2 semester-hours

## English 413. Modern Poetry

The distinctive poetry movements that have occurred during the present century are examined as expressions of changing social and artistic ideals. Critical appreciation is developed through comparison of diverse styles, themes, and poetic theories.

Credit: 2 semester-hours

## English 419. Theories and Teaching of Grammar

Both the traditional and the new approaches to the study and teaching of English grammar are studied. Relationships between grammatical rules and usage are examined to define the limits of grammar. The practical approach of structural linguistics to the problems of grammar in writing is discussed.

Credit: 2 semester-hours

# English 421. The Short Story

An analysis is made of the short story as an evolving literary form, emphasizing the productions of the Nineteenth and Twentieth Centuries. Stories are analyzed for both human and literary values.

Credit: 2 semester-hours

## English 428. The Film and Society

The film is studied and evaluated as an art form, an educational device, a social force, and an entertainment medium. The history of motion pictures, film techniques, and the scenario as a literary type are examined. Numerous films are shown, analyzed and discussed.

Credit: 2 semester-hours

# English 432. The Development of the Drama

Drama is studied in all periods from ancient Greece and Rome through the Middle Ages and the Renaissance to the beginning of modern drama with Ibsen. Major characteristics of the drama and its necessary complement, the theater are emphasized.

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## English 443. Modern Drama

Trends, developments, and accomplishments from 1915 to the present in the United States and Europe provide the background of this course. Examination of structure, content, and production of plays creates critical insight and appreciation. Wide reading and theater going are encouraged.

Credit: 2 semester-hours

## English 451. Literature and Art in Western Culture

Art provides an understanding among people throughout the world. By examining the relation between art and literature, and seeing that re-creation of experience is a function common to both, the student learns how literature provides understanding.

Credit: 2 semester-hours

## English 452. Five Great Books

Five books which have profoundly influenced the development of civilization are studied in depth.

#### DEPARTMENT OF FOREIGN LANGUAGES

In answer to the growing demand for graduate work, the Foreign Language Department offers a program based on STUDY ABROAD. Through personal contact and experience, the student, thus, can increase both his knowledge and understanding in respect to the people whose language he is preparing to teach. This means that the student does part of his graduate work at a selected college in a country where the language of his major is spoken. To assist with this program of STUDY ABROAD, the Foreign Language Department yearly offers scholarships for qualifying applicants. These scholarships are sustained by a Student Exchange Fund. Students who are interested in obtaining a Study Abroad scholarship should consult with the Chairman of the Department for particulars. This program is open only to graduates of Montclair State College. Ten semester-hours of graduate credit are granted for this work. The remaining twenty-two hours necessary for the Master's degree are to be selected from graduate courses offered at Montclair. There is also required a final comprehensive examination in the student's major field. The following plan outlines the work for a Master's degree in the Department of Foreign Languages:

I.	Basic Professional Course Requirements	Credits
	Education 503. Methods and Instruments of Research	. 2
	Education 603. Principles and Practices of Research	. 2
	Elective in Education	. 2
		6
II.	Requirements in Foreign Language Department	
	French 502. Study Abroad	
	or	10
	Spanish 502. Study Abroad	
	Courses in Department	. 8
		18
III.	Electives in Department or Other Departments	
111.		
	To be selected in consultation with the Graduate Counselor of the	
	Foreign Language Department	. 0
	Total	. 32

IV. Final Examination

#### GRADUATE COURSES IN FRENCH

#### French 505. Medieval French Literature

This course is designed to acquaint students with the history of French literature until the year 1500. The origins and development of the principal *genres*, including the *chanson de geste*, the *roman*, the theater and lyric poetry are discussed. Examples of each *genre* are selected for intensive study. This course is conducted entirely in French.

Prerequisite: An interview with the instructor

Credit: 2 semester-hours

#### French 506. French Literature of the Renaissance

This course is designed to acquaint students with the literature of 16th Century France. Particular emphasis is placed on works of Rabelais, Montaigne and the Pleiade. This course is conducted entirely in French.

Prerequisite: An interview with the instructor

Credit: 2 semester-hours

## French 515. The History of the French Language

This course is designed to acquaint the student with the developmental processes in language with special reference to French. It examines also the relationship between language change and cultural change. The French language is studied from its origins to the present time with units in Vulgar Latin, Old French, Middle French, Renaissance French, and Modern French. At each step, development phonology, morphology, and vocabulary are studied along with social backgrounds.

Prerequisite: 2 years of High School Latin

Credit: 2 semester-hours

#### SENIOR-GRADUATE COURSES IN FRENCH

# French 406. The Contemporary French Novel

This course is designed to acquaint students with the history and development of the French novel from Proust to the present day. Major currents and trends are analyzed; works of modern novelists,

including Proust, Gide, Malraux, Sartre, and Camus are read and discussed. This course is conducted entirely in French.

Prerequisite: At least three years of college French and an interview with the instructor for others than Montclair State College graduates

Credit: 2 semester-hours

#### French 407. Modern French Theater

The purpose of this course is to acquaint students with the history and development of the French theater since 1920. Major currents and trends in contemporary drama will be analyzed. Authors studied include Jules Romains, Paul Claudel, Henri de Montherlant, Jean Girardoux, Jean-Paul Sartre, Albert Camus and other dramatists representative of each major trend of the modern French theater.

Prerequisite: An interview with the instructor

Credit: 2 semester-hours

### French 421. French Language Seminar

This course is designed to acquaint students on the graduate level with the effective use of the laboratory in language teaching. Problems relating to materials, methods, new techniques, facilities, and scheduling are discussed. This course is conducted entirely in French.

Prerequisite: An interview with the instructor

#### GRADUATE COURSES IN SPANISH

## Spanish 505. Spanish Literary Expression and Style

This course presents a complete review of language skills through the study of representative Spanish literary schools and periods, with emphasis on vocabulary building, oral and written literary expression. The theory and practice of interpretation, the analysis of problems, language structure, and semantics are included. Practical exercises, composition, and comparison between original Spanish works and their English translations form an important part of the course work.

Prerequisite: At least three years of College Spanish and an interview with the instructor for others than Montclair State College graduates

Credit: 2 semester-hours

## Spanish 506. Spanish American Novel

The purpose of this course is to acquaint the student, through extensive reading and intensive discussion, with representative Spanish American novels from the XVI Century to the present time. These works include narratives depicting life in early colonial times; the novel of adventure; the picaresque tale; the romantic novel in its many different expressions, historical, indianistic, and descriptive; the psychological novel; the novel of the land; and the sociological novel. The students acquire a fundamental understanding of the history, life, customs, traditions, problems, and strife of the Spanish American people, as interpreted by their best novelists. The lives of the authors are studied to present a better picture of the country and the special circumstances depicted in the literature. The students are asked to evaluate the books studied as well as the criticism on them. Through this course the teacher of Spanish should become more thoroughly acquainted with the masterpieces of the Spanish American novel.

Prerequisite: At least three years of College Spanish and an interview with the instructor for others than Montclair State College graduates

Credit: 2 semester-hours

# Spanish 521. Contemporary Spanish Drama

This course includes an analysis of characters, space, and time in contemporary Spanish plays and their relationship to Spanish life.

Works of Benavente, Casona, Garcia Lorca, Lopez Rubio. Buero Vallejo, and Sastre are studied.

Prerequisite: An interview with the instructor

Credit: 2 semester-hours

#### SENIOR-GRADUATE COURSES IN SPANISH

# Spanish 415. Projects in Spanish and Spanish American Folk-lore

The purpose of this course is to give the Spanish teacher and Spanish majors a good understanding of the culture of Spain and Spanish America through the study of the different folklore expression of those countries. The traditions, the customs, the music and dances of the different regions of Spain and of the several Spanish nations, including Puerto Rico, are studied with a view of understanding sources and the influence that they have had in the history and lives of the peoples of those countries.

Prerequisite: At least three years of College Spanish and an interview with the instructor for others than Montclair State College graduates

Credit: 2 semester-hours

# Spanish 425. Contemporary Spanish-American Poetry

This course considers the development of Spanish-American poetry from 1890 until recent times including Ruben Dario, the impact of *Modernismo* in Spanish literature, the anti-modernist reaction, and the four major feminine poets, as antecedent for the appreciation and evaluation of Neruda, Pellicer, Marechal. Borges. Gorostiza. Carrera Andrade, Florit, Villaurrutia and Octavio Paz. Readings from recently published books and poetry magazines of wide circulation in Latin America are included.

Prerequisite: At least three years of College Spanish and an interview with the instructor for others than Montclair State College graduates

Credit: 2 semester-hours

# Spanish 430A. The Spanish Short Story, I

This course covers the study of the origin and development of the short story in Spain from the Middle Ages to the present time. Different types of short stories are studied in order to explain historically and sociologically the appearance of themes written in Spanish through the centuries. The aim of the course is to give the student additional understanding of the Spanish people, culture, and history as expressed by the Spanish short-story writers from the Thirteenth Century to the present Twentieth Century. This course is open only to seniors and graduate students.

Prerequisite: At least three years of College Spanish and an interview with the instructor for others than Montclair State College graduates

Credit: 2 semester-hours

#### Spanish 430B. The Spanish Short Story, II

This course covers the study of the Spanish short story as it developed in Hispanic America. This course is open only to seniors and graduate students.

Prerequisite: At least three years of College Spanish and an interview with the instructor for others than Montclair State College graduates

#### SENIOR-GRADUATE COURSES IN LATIN

#### Latin 406. Field Studies in Roman Civilization

This course is designed to acquaint students and teachers of Latin, history and languages with the Roman Conquest of Europe, specifically in Britain, France, Belgium, Switzerland, and Germany by studying and visiting Roman ruins and monuments in these countries, thus providing historical and archaeological background for the enrichment of their classes. Military invasions followed by colonization and the planting of Roman culture and civilization are an object of investigation, and remains "in situ" and in museums are viewed. Art and archaeology are reinforced by readings related to paralleling the site from the Latin authors: Caesar and Tacitus. Readings and a term paper due three months after the end of the tour are under supervision of the instructor. Lectures on the tours of the sites are given by historians, archaeologists, and military personnel, authorities on the area, secured from universities, archaeological societies, museums and cultural commissions.

Credit: 6 semester-hours

#### Latin 407. Laboratory Materials for Latin Teachers

An analysis of the function and use of a language laboratory for teachers of Latin, evaluation of current commercial materials and experimentation with teacher designed materials and patterns are the major topics of this course.

Prerequisite: An interview with the instructor

Credit: 2 semester-hours

# Latin 410B. Roman Civilization During the Empire

This course is designed to acquaint students and teachers with the Roman conquest of Europe, with emphasis placed upon the planting of Roman culture and civilization. The course provides a background of history and archaeology for all Latin programs. It is particularly recommended to those who take Latin 406.

#### SENIOR-GRADUATE COURSES IN LANGUAGE

Language 402. Advanced Phonetics (French)

This course is designed to provide students on the graduate level with a thorough foundation in Phonetic theory. Practical applications of this theory to the teaching of pronunciation and to the making of laboratory materials for correction of pronunciation are emphasized. Transcription and text analysis are practiced. Intensive work is done in the Language Laboratory.

Prerequisite: French 310 or equivalent, or interview with the instructor

Credit: 2 semester-hours

Language 402. Advanced Phonetics (Spanish)

This course is especially designed for Spanish teachers who wish to achieve a correct pronunciation and enunciation according to the best patterns of speech of the Spanish language. An intensive study is made of the manner and of the place of articulation of sounds heard in the Spanish spoken by the educated vernacular speakers of Spain and Spanish America. Skill is developed in the formation of the sounds of the Spanish vowels and the student is asked to compare them to the English vowels, marking differences. The difference between the articulation of the Spanish and the English consonants is demonstrated.

Prerequisite: At least three years of College Spanish and an interview with the instructor for others than Montelair State College graduates

Credit: 2 semester-hours

Language 408. Introduction to Language Laboratory.

This course is designed to acquaint language teachers with techniques of language-laboratory utilization and with the preparation of materials for use in the laboratory. Attention is given to equipment—its selection, operation, utilization, and basic maintenance. The course is open to all teachers of foreign languages and to audio-visual specialists, and is taught in English.

#### DEPARTMENT OF INDUSTRIAL ARTS EDUCATION

Graduate work in the Department of Industrial Arts Education is designed to help teachers of industrial arts (1) to become more proficient in teaching through study of recent trends and new developments in the field, (2) to improve organization of the industrial arts laboratory, and (3) to provide a basis for work in supervision and administration. Advanced work in industrial arts and related areas which will meet needs and broaden professional experiences of industrial arts teachers is emphasized.

An undergraduate major as established by the State Board of Education is a prerequisite for matriculation as a candidate for the degree. Individuals who have an undergraduate major in this area, but who do not wish to work toward a degree, may enroll in graduate courses in the department with the consent of the adviser.

# GRADUATE PROGRAM OF STUDIES MASTER OF ARTS DEGREE IN INDUSTRIAL ARTS EDUCATION

Ι.	Basic Professional Course Requirements	S. H.
	A. Ed. 503. Methods and Instruments of Research	
	B. Each student with the approval of his adviser selects four more semester-hours of education credit in 500 level courses	
	Total	6

#### II. Industrial Arts Requirements

- A. Each student, with the approval of his adviser, selects eighteen semester-hours of departmental work.
  - Ind. Arts 501. Curriculum Construction and Course Organization in Industrial Arts Education—2 semesterhours
  - Ind. Arts 502. Shop Planning and Equipment Selection in Industrial Arts Education—2 semester-hours
  - Ind. Arts 503. Problems in Teaching Industrial Arts—2 semester-hours
  - Ind. Arts 508. Survey of Industrial Arts Literature—2 semester-hours
  - Ind. Arts 511. Supervision of Industrial Arts 2 semester-
  - Ind. Arts 601. Seminar in Industrial Arts Problem Solving Approach to Teaching—4 semester-hours
  - Ind. Arts 602. Seminar in Research and Experimentation in Industrial Arts Education—4 semester-hours

Total

If the candidate chooses to develop a thesis, creative project, or field study, as a part of, or following research in Education 503 and Industrial Arts 602, a departmental sponsor is appointed. The "Regulations of Research and Thesis Requirements" are followed in the completion and acceptance of the thesis. Credit for such a project is to the extent of four semester-hours.

B. All candidates are required to submit a finished copy of their Education 503, *Methods and Instruments of Research*, paper to the Chairman of the Industrial Arts Department.

#### III. Electives

The candidate may select, after consultation with his adviser, courses to round out his background. Candidates are urged to explore the offerings in other departments and select as widely as possible in those areas not represented in undergraduate study.

Total

#### Comprehensive Examination

Each candidate who does not choose to develop a thesis, creative project, or field study, must pass a written comprehensive examination before the degree is awarded. The examination is given during the spring semester each year. Students desiring to take the examination should notify the Graduate Office prior to the beginning of the spring semester. They are then notified of the date and provided with general information pertaining to the examination.

#### **GRADUATE COURSES**

# Industrial Arts 501. Curriculum Construction and Course Organization in Industrial Arts Education

Curriculum construction techniques used in developing a program of industrial arts are studied. Special emphasis is placed on the development of industrial arts courses of studies and instructional materials.

Credit: 2 semester-hours

# Industrial Arts 502. Shop Planning and Equipment Selection in Industrial Arts Education

Principles of planning and equipment selection for modern industrial arts laboratories are stressed. The practical application includes architectural aspects, floor plan layouts, equipment selection, bid preparations, and construction of scaled laboratory models.

## Industrial Arts 503. Problems in Teaching Industrial Arts

Problems which teachers encounter in the industrial arts laboratory are analyzed. Individual and group reports are prepared, discussed, and evaluated in an effort to gain a better insight into these problems.

Credit: 2 semester-hours

## Industrial Arts 508. Survey of Industrial Arts Literature

Published material related to industrial arts is surveyed to determine its applicability to laboratory teaching and professional improvement. This includes historical writings on the development of industry and industrial education, research literature in the field, published materials provided by corporations and government agencies, and pertinent reference works, handbooks, and periodicals.

Credit: 2 semester-hours

## Industrial Arts 511. Supervision of Industrial Arts

Principles and practices of supervision, as related to the modern industrial arts laboratory are discussed and evaluated. Special attention is given to supervisory techniques, budget supplies, inventories, maintenance, safety, and upgrading of in-service teachers.

Credit: 2 semester-hours

# Industrial Arts 601. Seminar in Industrial Arts Problem-Solving Approach to Teaching

Students study the various techniques used in the problem-solving approach to teaching. Opportunity to plan and develop units as well as teaching materials based on this approach are evolved individually or by the group method.

Prerequisite: Education 503, Methods and Instruments of Research

Credit: 4 semester-hours

# Industrial Arts 602. Seminar in Research and Experimentation in Industrial Arts Education

Each individual is required to select a research problem which can be explored in the industrial arts laboratory. The purpose is to plan an experimental project, select the needed materials, organize the procedure, construct the necessary testing equipment, conduct the experiment, and record the findings. This departmental research course meets the research requirement for Education 603, *Principles and Practices of Research*.

Prerequisite: Education 503, Methods and Instruments of Re-

search

Credit: 4 semester-hours

#### SENIOR-GRADUATE COURSES

The following courses are not required for the Master's degree in Industrial Arts Education. With the approval of the Chairman of the Department, they may be used as elective credits.

# Industrial Arts 401. Comprehensive General Shop for Elementary and Junior High Schools

Laboratory experiences are geared to the principles and philosophy of the general shop at the elementary and junior high levels. Students plan and develop educational experiences which are related to the everyday living of both boys and girls.

Credit: 4 semester-hours

# Industrial Arts 402. Comprehensive General Shop for Senior High School

Students are encouraged to develop new skills or perfect those already developed in the numerous technical areas in the general shop on the high school level. Instructional materials and individual and group educational experiences are planned and developed.

Credit: 4 semester-hours

# Industrial Arts 407. Field Studies of Industry

A broad range of industrial firms are visited for purposes of noting and evaluating the processes used, the materials employed, the working conditions instituted, and the labor relations practiced. Every attempt is made to visit representative industries in the metropolitan area.

Credit: 4 semester-hours

# Industrial Arts 411. Industrial Photographic Techniques

Photographic techniques in industry are reviewed in this laboratory course. Tools, materials, and equipment are used and evaluated in connection with a variety of experiences in industrial photography and a consideration of recent developments in this field.

Prerequisite: Approval of instructor

## Industrial Arts 421. Jewelry Making and Lapidary

Through laboratory experiences students have the opportunity to develop lapidary and jewelry-making skills. They cast, form, and design pieces in silver, gold, and other metals. The lapidary experiences cultivate skills in sawing, shaping, polishing, and mounting of stones to exhibit their desirable qualities.

Credit: 2 semester-hours

#### Industrial Arts 431. Advanced Electronics

The students develop an understanding of alternating current and direct current principles and their application in electronics. Students construct and trouble shoot radio and television circuitry using a variety of test instruments.

Prerequisite: Approval of instructor

Credit: 2 semester-hours

## Industrial Arts 442. Conservation of Basic Industrial Materials

Students, while living for ten days at the New Jersey State School of Conservation, Stokes State Forest, study the origin, development, use and consumption of basic materials as they exist in nature, by taking field trips to resources and industries, by employing a variety of instructional aids, and by talking with specialists in each specific area.

Credit: 2 semester-hours

# Industrial Arts 443. The Use and Processing of Basic Industrial Materials by Modern Industry

Students live for ten days at the New Jersey State School of Conservation, Stokes State Forest. Study is devoted to recognition, use and processing of basic natural materials, such as ores, wood, fuels, and agricultural products to improve their value as industrial materials, such as leather and plastics. The course is developed through the use of films, field trips, and discussion with industry specialists.

#### DEPARTMENT OF MATHEMATICS

The graduate courses in mathematics are designed to meet the needs of teachers in service. There is opportunity for further study in pure mathematics, in applied mathematics, and in the teaching and supervision of mathematics. The courses in pure mathematics are designed to extend the student's knowledge of subject matter and to provide him with the background needed for teaching adequately in both traditional and experimental programs at the junior and senior high school levels. The courses in applied mathematics show the applications of mathematics in related areas of the physical, biological, and social sciences. The courses in teaching and supervision give attention to the current problems and proposals in mathematics education, the organization and construction of course syllabi, and administrative problems.

A candidate for the Master of Arts Degree in Mathematics should consult the Graduate Advisor of the Mathematics Department before matriculation, since the choice of graduate courses should be adjusted to the preparation acquired in undergraduate work. The student's work program, for a minimum of thirty-two semester-hours of work, is prepared in consultation with the Graduate Advisor. Any changes in the work program are made only with the written approval of that advisor.

## Requirements for the Master's Degree in Mathematics

- I. Prerequisites
  - A. The candidate for the M. A. degree must present an undergraduate major of at least thirty semester-hours of mathematics. Any deficiencies must be made up prior to conferment of the degree. This must be done in courses approved by the Graduate Advisor. The minimum requirements in category III below applies only to students with adequate previous preparation.
  - B. A year of calculus is a minimum prerequisite for registration in pure mathematics courses.

## II. Professional Education Requirements

minimum: 6 semester-hours

A. Each candidate must take Education 503, Methods and Instruments of Research, and Education 603, Principles and Practices of Research. These courses should be taken no later than the second year in which the student registers for courses.

- B. Each candidate must elect an additional two semester-hours in Education courses. These must be approved in advance by the Graduate Advisor in Mathematics.
- III. Mathematics Requirements . . . . minimum: 18 semester-hours
  - A. Pure Mathematics

Each candidate must take at least one course in each of the following sets:

- 1. Mathematics 503 and 504.
- 2. MATHEMATICS 508, 532, and 533.
- 3. Mathematics 523 and 524.
- MATHEMATICS 407 and 415 if not taken in undergraduate work.
- 5. MATHEMATICS 512, 517, 518, 519, 522, 531 and courses on the 400 level approved by the Graduate Advisor.
- B. Applied Mathematics

Each candidate must take at least two courses in this area. These courses include Mathematics 513, 551, 552, 602,\, B, and C, and 603A, B, and C.

- C. Teaching and Supervision of Mathematics
  Each candidate must take at least two courses in this area.
  These courses include Mathematics 501, 506, 507, 529, 530, and 640. Each candidate may take Mathematics 640, Research Seminar in Mathematics, in lieu of Education 603, Principles and Practices of Research. This must be taken after or concurrently with Education 503.
- IV. Elective Courses . . . . . minimum: 8 semester-hours With the approval of the Graduate Advisor, the student may elect from among Mathematics courses. Education courses, or other graduate courses.
  - V. Departmental Examination

A final examination in mathematics is given all candidates prior to the conferment of the degree. This examination is general in nature and is designed to test the candidate's maturity of thought in mathematics and mathematics education.

VI. Thesis (Optional)

After consultation with the Graduate Advisor of the Mathematics Department and under the sponsorship of a member of the mathematics faculty, the candidate may choose to develop a thesis giving the results of some study in the field of mathematics or mathematics education. In this case, the requirement of Mathematics 640 may be waived. The thesis will count in lieu of four semester-hours of elective study.

#### **GRADUATE COURSES**

# Mathematics 501. Administration and Supervision of Mathematics

This course is concerned with the problems met in organizing and supervising the teaching of mathematics. The topics considered are the functions and qualifications of the supervisor of mathematics, inservice training of teachers, demonstration lessons, professional attitude and preparation of teachers, department meetings, selection of texts, current problems, research, and the basis for determining objectives.

Credit: 2 semester-hours

## Mathematics 503. Foundations of Algebra

Careful consideration is given to the fundamental concepts and postulates which form the foundation of algebra. The modern algebraic theories of groups, rings, and number fields are introduced. The development of our number system, algebraic criteria for the possibility of geometric constructions, and the general theory and use of polynomial functions are considered.

Credit: 2 semester-hours

## Mathematics 504. Modern Algebra

Vectors and vector spaces are introduced as generalizations of numbers and number systems. Particular attention is also given to matrices, determinants, and linear dependence. Applications are considered.

Prerequisite: Mathematics 503 or permission of the instructor

Credit: 2 semester-hours

# Mathematics 506. Principles of Teaching Secondary School Mathematics

The primary purpose of this course is to relate recent psychological research into the learning process to the presentation of specific areas of secondary-school mathematics. Among the topics considered are: motivation, concept formation, drill, transfer of training, problem solving, and provisions for individual differences.

Credit: 2 semester-hours

# Mathematics 507. The Teaching of General Mathematics

This course is concerned with mathematics programs for the non-college-bound high-school student. Reports and recommendations

from curriculum studies are examined. Among the topics considered are: characteristics of non-academic students, consumer mathematics, remedial arithmetic, preparation and use of resource materials, and classroom teaching techniques.

Credit: 2 semester-hours

## Mathematics 508. Foundations of Geometry

The elements of geometry include the logical foundations of geometry, finite projective geometrics, construction of rational points on a line and on a plane, and topology. The emphasis is on the mathematical prerequisites for understanding contemporary proposals for secondary-school geometry.

Credit: 2 semester-hours

## Mathematics 512. Numerical Analysis

This course deals with the determination of functions from observed experimental data. Among the topics considered are: finite differences, symbolic operators, differencing, interpolation formulae, the method of least squares, and harmonic analysis. The course is designed to show the nature of mathematics as an applied science.

Credit: 2 semester-hours

## Mathematics 513. Computer Programming

This course is concerned with the elementary mathematics of computer programming. The use of machines by high-school students and the development of simple codes are considered.

Credit: 2 semester-hours

# Mathematics 518. The Theory of Functions of Real Variables

The fundamental properties of real numbers and the elementary properties of functions of real variables are systematically developed. Among the topics considered are: continuity, differentiability, integrability, algebraic and transcendental functions, hyperbolic functions, and infinite series.

Prerequisite: MATHEMATICS 407 or permission of the instructor

Credit: 2 semester-hours

# Mathematics 519. The Theory of Functions of Complex Variables

The fundamental properties of complex numbers and the elementary properties of functions of complex variables are developed. These

include the properties of mappings, line integrals, Cauchy-Goursat Theorem, and conformal mapping. The practical applications of the theory are stressed by the use of illustrative examples.

Prerequisite: Mathematics 407 or permission of the instructor

Credit: 2 semester-hours

## Mathematics 522. Introduction to Probability and Statistics

The primary objective of the course is to give at least a minimum preparation in probability and statistics for the topics that are included in the newer high-school program. Topics include: the summarization of data, intuitive probability, axiomatic development of probability, the Binomial and Poisson distributions, the normal curve distribution, elements of sampling and elements of testing hypotheses. Both the experimental and the axiomatic approach to this material are studied. An examination of currently available material is included. This course is not open to students who have received credit for MATHEMATICS 307 or 408.

Credit: 2 semester-hours

## Mathematics 523. The Theory of Probability

This course develops the formal mathematical theory of probability and also describes the empirical background. In addition a variety of applications in both physical and social sciences are developed. Topics include: historical background; sample space; elements of combinatorial analysis; Binomial, Poisson, and Hypergeometric distributions; normal distribution; mathematical expectation; random walk; and ruin problems.

Credit: 2 semester-hours

# Mathematics 524. Statistical Inference and Sampling Theory

In this course the student considers the planning and execution of a statistical study. Among the topics considered are: problems in descriptive statistics, discrete and continuous distributions, elements of sampling theory, tests of hypotheses, power functions of statistical tests, analysis of variance and covariance, statistical control, statistical efficiency, and nonparametric statistics. Applications are given to industrial, scientific, and social problems.

Prerequisite: Mathematics 307, 408, or 522

#### Mathematics 529. Curriculum Construction in Mathematics

This course is concerned with the implications and classroom implementation of contemporary recommendations for college preparatory curriculums in secondary-school mathematics.

Credit: 2 semester-hours

# Mathematics 530. Mathematics Materials for the Teacher of Mathematics

This course is concerned with the adaptation and use of materials to motivate and improve the teaching of high-school mathematics. Particular attention is given to the equipment needed for a modern mathematics laboratory; to the effective use of such equipment; to such visual aids as pictures, drawings, slides, motion pictures, and bulletin-board exhibits; and to books, periodicals, and pamphlets needed for the school and for the teacher's library. Material available for individual and club activities in mathematics is considered.

Credit: 2 semester-hours

## Mathematics 531. Survey of Higher Mathematics

This course is intended for students who have already taken several graduate courses in mathematics. The principal aim of the course is to provide these students with additional insight into the nature and content of the various fields of mathematics.

Credit: 2 semester-hours

# Mathematics 532. Projective Geometry

The methods of synthetic and analytic projective geometry are compared and used to emphasize the fundamental concepts of Euclidean geometry. Emphasis is placed upon the dependence of many common properties and theorems of Euclidean geometry and upon the properties of lines, parallelism, perpendicularity, similarity of figures, and the definition of distance.

Prerequisite: Mathematics 508 or permission of the instructor

Credit: 2 semester-hours

## Mathematics 533. Non-Euclidean Geometry

The development of Hyperbolic-Non-Euclidean and of Elliptic-Non-Euclidean geometry is carefully traced. A brief survey of the historical development of each is given. This course is designed for teachers and students of mathematics who desire a better perspective of the field of geometry.

#### Mathematics 551. Mathematics of Social Sciences

This course surveys the mathematics of economics, business, sociology, and psychology. The discussion includes such topics as: theory of investments, distribution of wealth and income, use of charts and graphs, business trends, and measurement and presentation of data in social sciences.

Credit: 2 semester-hours

## Mathematics 552. Mathematics of Physical Sciences

This course includes topics from physics; chemistry; and engineering. The chief purpose is to supply the teacher with background material that may be used to enrich the teaching of secondary-school mathematics.

Credit: 2 semester-hours

# Mathematics 602A, B, and C. Workshop on Secondary School Mathematics

These courses are conducted as workshops to provide teachers with increased insight into contemporary mathematics. The emphasis is upon mathematical principles and concepts. Topics are selected for their significance in revisions of secondary-school mathematics programs. The topics include: analysis of statements, sets, algebra of sets, foundations of algebra, probability, statistics, statistical inference, foundations of geometry, topology, and mathematics of the infinite.

Credit: 2 semester-hours each

# Mathematics 603A, B, and C. Workshop on Junior High School Mathematics

These courses provide the necessary mathematical background to understand and interpret current curriculum recommendations in the junior-high school. Areas covered include: structure of the number system, probability, foundations of algebra, and foundations of geometry, each of which is oriented for junior-high-school teachers. Current curriculum recommendations are examined.

Credit: 2 semester-hours each

## Mathematics 640. Research Seminar in Mathematics

This course is designed primarily for students who are fulfilling the College requirement of four semester-hours of research for candidates for the M. A. degree who matriculated after August 31, 1959. Candidates in mathematics select some problem of interest in either the subject matter or the teaching of mathematics for intensive study and research.

The student should register for EDUCATION 503 in the first semester of the year that he takes this seminar. He, thus, has the advantage of consultation with both research and mathematics advisers while conducting his investigation.

Prerequisite: Education 503, Methods and Instruments of Research

Credit: 2 semester-hours

#### SENIOR-GRADUATE COURSES

## Mathematics 405. History of Mathematics

This course surveys the history of elementary mathematics, through calculus, from ancient times to the present. Emphasis is on the major developments in the fields of arithmetic, algebra, and geometry and on contributions of leading mathematicians. The solution of mathematical problems in their historical context is an important part of the course. A by-product is the motivating effect of historical information on the teaching and learning of mathematics.

Credit: 2 semester-hours

## Mathematics 406. Solid Analytic Geometry

This course includes a study of the basic elements of three-dimensional analytic geometry along with reference to the extensions to n dimensions. Topics are: coordinates and graphs, vectors, planes and lines, applications of determinants and matrices, surfaces and curves, quadric surfaces and their classification, the general equation of the second degree, and coordinate and point transformations.

Credit: 2 semester-hours

# Mathematics 407. Advanced Calculus

The purposes of this course are twofold: fundamental notions of calculus, such as sequences, limits, differentiation, integration, the Generalized Theorem of the Mean, partial derivatives, multiple integrals, and infinite series are rigorously developed and examined: also, some extensions of these basic concepts are introduced. In this latter set are such topics as: line integrals through Green's Theorem, Fourier series, elliptic integrals, and gamma and beta functions.

Credit: 2 semester-hours

# Mathematics 409. Introduction to Contemporary Mathematics

The aim of this course is to develop the point of view of contemporary mathematics and to consider its potential influence upon secondary-school mathematics. Consideration is given to topics in professional literature for possible inclusion in secondary-school mathematics. Topics include sets, Boolean algebra, a modern concept of variable and function, a detailed study of sentences and statements, the use of symbolism and patterns in mathematics, linear programming, and application of new mathematical techniques in social sciences.

Credit: 2 semester-hours

#### Mathematics 410. Mathematics of Finance

This course introduces the elementary theory of simple and compound interest and leads to the solution of practical problems in annuities, sinking funds, amortization, depreciation, stocks and bonds, installment buying, and savings and loan associations. It discusses the mathematics of life insurance covering the following: the theory of probability as related to life insurance; the theory and calculation of mortality tables; various types of life annuities and insurance policies and reserves. This course gives a helpful background to the mathematics teacher and aids the student of economics and insurance.

Credit: 2 semester-hours

# Mathematics 411. Elements of Mathematical Thought

This course acquaints students having a limited background in mathematics with the logical structure of mathematics. There is an emphasis on postulational foundations and the reasoning process itself. Topics considered include: the nature of mathematical knowledge, the origin and influence of logical systems, essentials of logical reasoning, and examples of logical systems from algebra and geometry.

Undergraduate mathematics majors desiring to take this course must secure special permission.

Credit: 2 semester-hours

## Mathematics 412. Modern Geometry

This course is concerned with synthetic and coordinate methods in plane and solid geometry. It provides students who have not taken Mathematics 301 with background for teaching secondary-school geometry. It is not open to students who have taken Mathematics 301. The structure of high-school geometry and foundations of geometry are also considered with trends and proposals for secondary-school geometry.

## Mathematics 415. Differential Equations

Applications of differential equations and their standard methods of solution are treated in this course. Topics are: linear differential equations of the first degree and of the first and higher orders, linear equations of the nth order with constant coefficients, linear equations of the second order, exact and total differential equations, simultaneous equations, numerical approximation, and series solutions.

Credit: 2 semester-hours

## Mathematics 417. The Theory of Numbers

This course offers a systematic treatment of certain fundamental properties of numbers along with a discussion of their historical background. It includes such topics as: properties of integers; Euclid's algorism; prime numbers; factorization; perfect numbers; linear indeterminate and Diophantine problems; properties of congruences and their solutions; fundamental theorems of Euler. Fermat. Wilson, and others; and quadratic residues.

Credit: 2 semester-hours

### Mathematics 432. Analytical Topology

The aim of this course is to introduce the student to some of the terminology, concepts, and methods of a rich branch of mathematics which has proved to be a fertile area for current research in mathematics. Special emphasis is to be placed on the "topological" structure of the familiar real line (set of real numbers), ordinary Euclidean space, and metric spaces in general. This course is designed to provide a background for both understanding more fully the results of classical analysis (calculus), and for studying "modern" analysis.

Credit: 3 semester-hours

## Mathematics 453. Differential Calculus

Concepts of differential calculus are developed for science students who have taken one year of college mathematics. Topics include: functional relationships, slope, limit, continuity, graphical representations of science problems, differentiation of algebraic and transcendental functions, geometric and physical application of derivatives, velocity, and acceleration in curvilinear motion. Applications are developed utilizing the scientific background of the students. Students credited with Mathematics 201 may not take this for credit.

## Mathematics 454. Integral Calculus

Concepts of integral calculus are developed for students who have completed MATHEMATICS 453 or equivalent. Topics include: integration procedures, solid analytic geometry, and geometrical and physical applications of the definite integral in two and three dimensional problems. Applications utilize the scientific background of the students. Students credited with MATHEMATICS 202 may not take this for credit.

Credit: 3 semester-hours

#### Mathematics 480. Elements of Logic

This course develops an understanding of methods of reasoning used in the mathematical sciences. The point of view and elementary processes of symbolic logic are studied. Background materials are included for teaching of logical concepts in secondary schools.

#### DEPARTMENT OF SCIENCE

The graduate program of the Science Department is designed to help the science teacher with the problem of maintaining his professional competence with respect to recent advances in the fields of science and science education.

Prior to matriculation in the Science Department for the Master of Arts degree the student should complete a subject matter background of at least twenty-four semester hours of college science. This undergraduate program must show breadth in the three areas of science, biology, chemistry, and physics, plus sufficient depth in at least one area to serve as a base for the graduate program. If the degree candidate does not meet these provisions, the graduate adviser in science may require that the six semester-hours of electives in the graduate program be taken in the major area.

In cases where there is a weak undergraduate program in the major field, prerequisite courses, not for graduate credit, may be assigned. In general, the assignment of elective hours to the major area would compensate for deficiencies in depth of preparation while prerequisite courses would compensate for deficiencies in breadth.

A minimum of eighteen semester-hours of graduate credit work in science is required. The student's work program is prepared in cooperation with the science adviser. Any changes in the student's work program are made only with the written approval of the science adviser.

# COURSE REQUIREMENTS FOR THE M.A. DEGREE IN SCIENCE

I. Education Requirements

Each student must take Education 503, Methods and Instruments of Research, and four additional semester-hours in Education courses.

## II. Science Requirements

A. The candidate must complete three four-semester-hour courses from among the following:

Biology 407, 408, 409, 410, 411, 415, 506, 509

Chemistry 407, 408, 411, 412, 508, 509, 510

Physics 402, 405, 406, 407, 409, 411, 416, 510, 512

Science 405, 421

12 semester-hours

B. The candidate may elect two to three semester-hours from among the following:

Biology 501, Chemistry 501, Science 401D, Physics 501

C. The candidate may elect up to six semester-hours from among the following:

Biology 412, 413, 414

Chemistry 413, 414

Physics 408, 410, 513

Science 409, 410, 411, 412, 413, 414, 415, 418, 419, 420

D. The candidate must complete the departmental research requirement by one of the two procedures below:

Science 505 Research Seminar in Science . . . . 2 s. hrs.

or

Graduate 600 Master's Thesis ................. 4 s. hrs.

If the candidate chooses to develop a thesis following completion of Education 503, a departmental sponsor is appointed and the "Regulations of Research and Thesis Requirements" are followed in completion and acceptance of the thesis. The preparation of such a dissertation does not relieve the candidate of any of the required work in science.

E. After consultation with his adviser, the candidate may elect from among science courses, education courses, or other courses on the 400-500 level.

Maximum possible for E — 6 semester-hours

#### **BIOLOGY**

#### GRADUATE COURSES

## Biology 501. The Teaching of Biology in Secondary Schools

This is a seminar and research course designed to give opportunity for study of the best methods and practices being used in the teaching of secondary school biology. Major topics of discussion are: aims of secondary school biology, course content. functions of textbooks, testing, laboratory exercises and demonstrations, and the collection and use of suitable and available laboratory materials. A study is made of recent research studies in the field of biology teaching.

Prerequisite: 16 semester-hours in biology

Credit: 3 semester-hours

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#### Biology 506. Histology and Histological Technique

This course includes a study of the microscopic anatomy of living forms in order to bring about the fuller appreciations of their structure and function. The structural characteristics of cells and their specialization according to function are considered as well as the organization of this basic unit into the tissues and organs of the intact form.

The study of histological preparations during the laboratory period gives the student an opportunity to learn the characteristics of each tissue and organ. Basic procedures for the preparation of tissue sections and permanent mounts are covered.

Prerequisite: 8 semester-hours in biology

Credit: 4 semester-hours

# Biology 509. Field Studies of Flowering Plants

The emphasis of this course is placed upon the methods of identification of higher plants and the ecological factors affecting the growth and development of these plants. Plants in their winter conditions are considered first. As the season progresses, the emphasis changes from the identification of woody to herbaceous forms. Plant communities of various types are observed, and the factors influencing their development are discussed. Field trips are taken to such typical habitats as the Pine Barrens, and Troy Meadows.

Prerequisite: General botany

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#### SENIOR-GRADUATE COURSES

#### Biology 407. Comparative Embryology

A study is made of the stages in development and factors influencing the development of different animal types, particularly the vertebrates. Students in this course follow carefully the development of the chick through the earlier stages. Serial sections of entire chick embryos in different stages of development are prepared by individual students and used as a basis for the study of the development of tissues and organs of the animal. Applications of these details of vertebrate development to the development of the mammal are based on observations made through the dissection of pig embryos.

Prerequisite: 8 semester-hours in zoology

Credit: 4 semester-hours

#### Biology 408. Biological Technique

The prospective teacher of biology is provided an opportunity to learn the technical details and methods so important to the successful handling of biological specimens, materials, demonstrations and experiments. Instruction is provided in the techniques of collecting and preserving plant and animal specimens for classroom and laboratory use. Displays and illustrative materials and the role of these in classroom and laboratory teaching are considered.

Prerequisites: 8 semester-hours in zoology and 4 semester-hours in botany

Credit: 4 semester-hours

## Biology 409. Human Physiology

A study is made of normal and abnormal physiology based on previous study of mammalian anatomy and histology. In addition to an analysis of the part played by organs and tissues in carrying out the essential functions of the body, special attention is given to problems of hygiene and sanitation. Applications of these problems are made in reference to children of school age, and the physical condition of individual pupils is correlated with their behavior in the classroom.

Prerequisite: A course in vertebrate anatomy or Biology 402

## Biology 410. Comparative Anatomy of the Vertebrates

Representative members of the phylum chordata are studied. The prochordata are considered briefly. Representative species of the cyclostomata, cartilagenous fish, bony fish, amphibia. reptiles. birds, and mammals are studied by means of dissections and demonstrations. Fundamental principles of taxonomy, anatomy, physiology, and ecology are reviewed and amplified. This course should enrich the background of those interested in vertebrate forms and be of value for those interested in man and his place in the world.

Prerequisite: 8 semester-hours in zoology

Credit: 4 semester-hours

## Biology 411. Bacteriology

General biological phenomena is demonstrated by microbial life by means of laboratory experimentation with bacteria and other microorganisms. Major topics include: history of microbiology, classification, morphology, metabolism and ecology. Emphasis is placed upon the economic importance and the relationship of microorganisms to human welfare, health, and disease. Specific laboratory techniques and procedures are developed in the course.

Prerequisites: General botany, general zoology, and inorganic and

organic chemistry

Credit: 4 semester-hours

## Biology 412. Genetics

The basic facts, principles, and theories of variation and heredity as illustrated in microorganisms, higher plants, animals, and man are considered. Modern cytological, embryological, developmental and statistical approaches are developed. The newer concepts of the gene, mutation, and gene action are considered. Practical exercises are used to illustrate the principles.

Prerequisite: Elementary biology of collegiate grade and 'or permission of the instructor

Credit: 2 semester-hours

## Biology 413. Economic Botany

The consideration of the importance of plants and plant life to the world in general and to man in particular is the principal aim in this course. The economic importance of bacteria, fungi, and other lower plants is considered, as well as that of the seed plants.

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## Biology 414. Field Ornithology

New Jersey is one of the best areas in the East for the study of birds. On the Montclair campus alone, over 130 species have been observed. This course deals primarily with the identification and natural history of birds. A variety of habitats are visited so that one may become acquainted with the habits and requirements of this unusually well-adapted vertebrate type. Migration, methods of attracting and protecting birds, the value of birds, and related topics are also considered.

Prerequisite: A year of biology or the equivalent

Credit: 2 semester-hours

## Biology 415. Entomology

Designed to cover the fundamental aspects of entomology, this course gives students general ideas of the entire field. The major emphasis is on understanding basic principles which are of physiological and ecological significance. A survey is made of the common insect families together with experience in identifying major orders and families. Attention is given to insects as economic pests and as vectors of disease. Laboratory work includes a study of gross and microscopic morphology and identification of major groups of insects by the manipulation of keys.

Prerequisites: BIOLOGY 201 and 202

Credit: 4 semester-hours

## **CHEMISTRY**

# GRADUATE COURSES

# Chemistry 501. The Teaching of Chemistry in Secondary Schools

A study is made of the objectives, recent trends, methods of presentation, courses of study, lesson planning, instructional aids, and subject matter of high school chemistry.

Prerequisite: 16 semester-hours in chemistry

Credit: 3 semester-hours

# Chemistry 508. Biochemistry

In this course a study is made of the composition of living organisms, their nutritional requirements, their mechanism for promoting and regulating chemical action, and their metabolism of foods.  $\Lambda$ 

laboratory study is made of the components of foods, enzyme action. isolation of proteins, etc., blood and urine analysis.

Prerequisite: Organic chemistry

Credit: 4 semester-hours

#### Chemistry 509. Advanced Inorganic Chemistry

This course offers opportunity for intensive and systematic study of the elements in the light of the periodic classification. Selected theories and principles of inorganic chemistry and some of their applications are studied in detail. A study is made of types of compounds. Directed use of chemical literature is an important part of this course. Individual experimental work in the laboratory consists chiefly of preparation and purification of inorganic compounds and testing for impurities in the products.

Prerequisite: General college chemistry

Credit: 4 semester-hours

### Chemistry 510. Food Inspection and Analysis

A study is made of the composition of commercial food products. the laws governing purity and marketing of foods, methods of analysis of foods. Laboratory work is an extension of chemical and microscopic analysis to provide application of various analytical methods. Methods of extraction; detection of adulterants, preservatives, coloring; estimation of carbohydrates, fats, proteins, minerals, and vitamins are included in the laboratory work of the course.

Prerequisites: Organic chemistry and quantitative analysis

Credit: 4 semester-hours

## SENIOR-GRADUATE COURSES

## Chemistry 407. Advanced Quantitative Analysis

This course is adapted to the needs of students. The student, after consultation with the instructor, may select analyses from the following: general or special types of oxidation-reduction; gravimetric methods; colorimetric methods; use of organic reagents in analyses; electrometric titrations, conductimetric titrations; spectographic methods of analysis; electro-deposition of metals; and special methods of analysis.

Prerequisites: General college physics and one semester of quanti-

tative analysis, or permission of the instructor

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### Chemistry 408A. Industrial Chemistry, Part I

The purpose is to enable science teachers to understand the type of chemical industries in the State of New Jersey and the nature of their problems. A survey is made by lectures, reports, and trips to plants of the chemical industries. This section of the course stresses the importance and the characteristics of chemical industry, the various unit operations used by the industry to carry out chemical reactions, the controls used to insure quality, the organization for research, and the type of workers employed.

Prerequisites: General and organic chemistry, or permission of

the instructor

Credit: 2 semester-hours

## Chemistry 408B. Industrial Chemistry, Part II

This course is a study of the chemical industries of the metropolitan area utilizing the methods outlined in Chemistry 408A. Also, a study is made of the economics of chemical industry, chemistry, and industry in general, and the effects of chemical discoveries upon living conditions.

Prerequisites: General and organic chemistry, or permission of

the instructor.

Credit: 2 semester-hours

## Chemistry 411. Physical Chemistry, Part I

This course, the first half of a year's work in physical chemistry, deals with gases, liquids, crystals, physical properties and electrolytes, colloids, thermo-chemistry, and homogeneous and heterogeneous equilibria.

Prerequisites: General college chemistry, analytical chemistry, and general college physics.

Credit: 4 semester-hours

## Chemistry 412. Physical Chemistry, Part II

This course deals with electrical conductance, electrolytic equilibrium, electromotive force, electrolysis, polarization, chemical kinetics, photochemical reactions, atomic structure, molecular structure, and radioactivity.

Prerequisites: General college chemistry, analytical chemistry, and general college physics.

## Chemistry 413. Atomic Structure and Atomic Energy

This is a lecture course designed to familiarize the student with a modern conception of the structure of matter and to acquaint him with some significant aspects of atomic energy. Some of the topics: discoveries leading to knowledge of the structure of the atom; isotopes; nuclear fission; nuclear reactions; chemical versus atomic explosions; the chain-reacting pile; production of plutonium; detection and measurement of nuclear radiation and incendiary effects of atomic explosions; atomic energy for peace-time uses; radio-active isotopes in agricultural, biological, and chemical research; and availability of materials.

Prerequisites: General college chemistry and general college physics, or permission of the instructor

Credit: 2 semester-hours

### Chemistry 414. Introduction to Radiochemistry

This course is an introduction to the use of radioisotope experiments for the chemistry curriculum. The course consists of lecture and laboratory work which covers such topics as detection instruments. counting techniques, sample preparation, radiochemical separations by co-precipitation, chelation, and ion-exchange techniques.

Prerequisites: General college chemistry, general college physics, or permission of the instructor

Credit: 2 semester-hours

## PHYSICS

## GRADUATE COURSES

## Physics 501. The Teaching of Physics in Secondary Schools

A study is made of the objectives, methods, and techniques of presentation, courses of study, lesson planning, instructional aids, and subject matter of high-school physics. Attention is given to the recent trends in developing apparatus and other equipment suitable for teaching the principles of physics. Assignments are made from recent literature on the outcomes of teaching of physics by television and by other visual aids.

Prerequisite: 16 semester-hours in physics

Credit: 3 semester-hours

## Physics 510. Advanced Problems in Photography

This course is intended to meet the needs of the camera club teacher and the hobbyist. The course includes negative and positive alterations toning, printing processes, studio portraits, color photography, and photomicrography. The student is expected to submit prints of exhibition quality for public showing.

Prerequisites: General college physics, general college chemistry, and a first course in photography.

Credit: 4 semester-hours

#### Physics 512. Modern Physics

This course is a survey of recent experimental research in physics and of the newer theories concerning nuclear physics and electricity. Such topics as atomic spectra, radioactivity, artificial transmutation of the elements, and cosmic rays are discussed.

Prerequisites: General college physics, general college chemistry, and a course in electrical measurements.

(No credit is given for Physics 512 if student has taken Physics 415.)

Credit: 4 semester-hours

#### Physics 513. Nuclear Radiation

A study of the nature of radiations is made. Particular attention is given to radiation measurement technique. The course is concluded with a study of health physics as related to radiation dosages and their effects. Some attention is paid to disposal of radioactive wastes, radiation protection, and safety precautions.

Prerequisites: General college physics, general college chemistry,

and a course in electrical measurements.

Credit: 2 semester-hours

## SENIOR-GRADUATE COURSES

## Physics 402. Magnetism and Electricity

The purposes of the course are: (1) to provide a background of training in the fundamental laws and principles governing the generation and use of electricity; (2) to develop skill in manipulating laboratory and demonstration apparatus; and (3) to learn the basic principles of alternating current circuits.

This course consists of lectures, demonstrations, reference readings, written and oral reports, laboratory experiments with modern electrical instruments, and construction of simple electrical devices. Some of the topics studied are: modern concepts of the electronic structure of matter, electrical forces, magnetic fields, potential, re-

Science 105

sistance, impedance, capacitance, and characteristics of thermionic vacuum tubes.

Prerequisite: General college physics

Credit: 4 semester-hours

Physics 405. Light and Optical Instruments

Topics included for study in the classroom and laboratory are: the propagation of light; emission and absorption of radiant energy; reflection, refraction, polarization; spectrum analysis; photometric measurements; photoelectric cells; measurement of high temperatures; characteristics of illumination, modern illuminants; and industrial and domestic uses of light.

Prerequisites: General college physics and a course in electrical measurements

Credit: 4 semester-hours

## Physics 406. Astronomy

This course is designed to acquaint the student with the celestial sphere, celestial motions, and the phenomena associated therewith; to make him aware of the principles of astronomy. It consists of a survey of the solar system, practical problems in locating and identifying celestial bodies, a consideration of light and matter, the basic laws of motion, the physical-chemical properties of the sun and stars, stellar scales and maps, the measurement of distance, the cosmology of the universe, the history of astronomical concepts, and the regularities, irregularities, and evolution of the solar system.

This study is aided by the use of selected films and slides, actual sky study and field trips, the use of the sextant, octant, transmit, spectroscope, sky maps, planetaria, and telescopic observations.

Prerequisites: General college physics and chemistry

Credit: 4 semester-hours

## Physics 407. Aviation

This course deals with the historical development of aviation, air traffic rules, air-worthiness regulations, pilot certification, types of aircraft, aircraft structures, principles of aerodynamics, lift, drag, stability, motions of an airplane, piloting, motorless flight, aircraft engines, power performance, types of propellers, engine instruments and flight instruments.

Field trips to airport and aviation industries are included. Flight experience is made available as a part of this course.

Prerequisite: General college physics

### Physics 408. Advanced Aviation

This course deals with the study of navigation, meteorology as applied to flight operations, radio communications, flight and navigational aids, instrument flight, air traffic control, jet, turbojet and rocket flight, and recent advances in aviation.

Prerequisite: A college level course in aviation

Credit: 2 semester-hours

#### Physics 409. Basic Electronics

An introductory course in basic electronic phenomena covering such topics as elementary circuit theory, electron emission, vacuum tube characteristics, vacuum tubes as circuit elements, gaseous discharge, and the use of transistors. Applications of electronics to instrumentation, radio, and television are introduced.

Prerequisites: General college physics, and a course in magnetism and electricity

Credit: 4 semester-hours

### Physics 410. Meteorology

This course develops a fuller appreciation of our atmosphere with emphasis on meteorological applications of physical principles. Consideration is given to weather elements; temperature effects; air currents, air masses, and fronts; the collection, dissemination, and interpretation of weather data; and the general applications of meteorology. The student is expected to learn to use meteorological instrumentation, and emphasis is placed upon the improvisation of apparatus and equipment.

Prerequisite: General college physics

Credit: 2 semester-hours

## Physics 411. Photography

This course consists of laboratory work and field work supplemented by lectures and demonstrations. Emphasis is placed on physical principles in the construction of cameras, projection printers, tanks, and filters. Special attention is given to chemical principles in the development of films and paper, toning, intensification, and reduction.

Prerequisites: General college physics and general college chemistry or permission of the instructor

### Physics 415. Introduction to Modern Physics

This course is designed to give the student a general view of the important advances in physics during the past fifty years. In the first part of the course considerable time is spent in the study of electron theory. Some of the topics considered are: the hydrogen atom, optical and X-ray spectra, natural radioactivity, cosmic ray, nuclear fission, new elements and isotopes, and particle accelerators. Some laboratory work is required.

Prerequisites: General college physics, general college chemistry, and a course in electrical measurements

Credit: 4 semester-hours

### Physics 416. Introduction to Analytic Mechanics

This course is a background for science teachers. It includes some treatment of the physics of classical mechanics, of the kinematics and dynamics of particles, and the dynamics of rigid bodies. Mathematical methods of handling data and theory are introduced and developed. The course consists of lectures, discussions, demonstrations of practical application, and problem solving. There are two hours of lecture-recitation and four hours of laboratory work per week.

Prerequisite: General college physics

Credit: 4 semester-hours

### SCIENCE

## **GRADUATE COURSES**

## Science 505. Research Seminar in Science

This course is designed to afford opportunity for graduate students in science, supervisors, and science teachers: (1) to investigate research in science education: (2) to organize science experiences and science information with the teaching materials for the public schools. Each member of the group selects a project. This project must be presented to the science faculty and graduate students for evaluation.

Prerequisites: Matriculation for M.A. degree in science, registered concurrently for Education 503, or permission of

the instructor

108 Science

#### SENIOR-GRADUATE COURSES

## Science 401D. The Teaching of Aviation in Secondary Schools

This course covers the study of State aviation programs, texts, bulletins, free material for school use, demonstration equipment, tests, working models, visual aids, and references needed to teach aero-dynamics, aircraft engines, meteorology, navigation, and aircraft communication in high schools. Field trips to airports and aviation industries are included.

Credit: 2 semester-hours

## Science 405. Field and Laboratory Studies in Science

This integrated course is designed to show the relationship in the geological rock formations, the types of soil, water patterns, plant communities, and animal inhabitants in northern New Jersey, and the effects on human occupations. The field trips are for the purpose of gathering data and materials for intensive work in the laboratory. The experiments are designed to give the student acquaintance with the science of common but possibly unstudied features of the landscape; e.g., soils are reproduced in profile and examined microscopically, physically, and chemically; water from a variety of sources is tested for biological and chemical impurities; the census of plant and animal inhabitants of typical areas is associated with relevant factors in the environment. Discussions precede and follow the field and laboratory work to establish the probable history of the area and to suggest the probable trend, whether advancing or retrogressing, of its development. Stress is placed on the kinds of human control in specific communities which would best serve their progress.

Students are asked to submit an analysis of the geological and biological features of some known community, based on the skills and principles learned. Some other objectives of the course include an understanding of the organization of school museums for learning purposes, the making of ecological maps and illustrating them with photographs and diagrams, and the techniques of ecological field trips. Two instructors, a chemist and a biologist, collaborate in giving this course.

Prerequisite: Proficiency in biology and chemistry

Science 109

## Science 409. Senior-High-School Physical Science Demonstra-

This course furnishes teachers of the physical sciences with demonstrations and experiments designed for work in high-school chemistry, physics, and applied physical science courses. A detailed study of demonstrations is made with emphasis on visibility and avoidance of failure. Emphasis is placed on sources of new demonstrations.

Credit: 2 semester-hours

### Science 410. Junior-High-School Science Demonstrations

This course covers the methods of experimental instruction appropriate to grades seven, eight, and nine. A detailed study is made of demonstrations for general science at their levels.

Credit: 4 semester-hours

#### Science 411. Problems in Field Studies in Science

In this course each student selects a phase of field science in which he does advanced research under the guidance of the instructor. Plant ecology, bird-life, pond life, fungi, tree diseases, and insect life are a few of the areas from which the student may choose.

Prerequisites: Science 412, Field Studies in Science, or its equivalent, plus at least 12 points of biology.

Credit: 2 semester-hours

## Science 412. Field Studies in Science: Biological

Extensive instruction in the identification and natural history of fauna and flora is given in this course. Students examine the ecology of plant and animal communities (terrestrial and aquatic) and relate such communities with man's use of natural resources. The relation of field activities to present school curricula is considered. No previous science courses are required.

Credit: 2 semester-hours

## Science 413. Field Studies in Science: Physical

Emphasis in this course is given to local and New Jersey geology, minerals, soils, and waters, with emphasis on the chemical and physical aspects of soil and water. Field trips are taken through the Kittatinny Mountains and to the Delaware Water Gap.

SCIENCE 110

#### Science 414. Conservation of Plants and Animals

The social, economic, and ecological implications of plant and animal conservation are considered together in this course. Discussion periods are interspersed with field trips to forest and wildlife management areas. Cooperating experts from state and federal agencies bring special contributions in their fields. Visual aids are used extensively.

Credit: 2 semester-hours

#### Conservation of Soil and Water Science 415.

The social, economic, and ecological implications of soil and water conservation are considered together in this course. Discussion periods are interspersed with field trips to selected areas. Outside experts bring special contributions in their fields. Visual aids are used extensively.

Credit: 2 semester-hours

### Science 418. Three Centuries of Science Progress

This course includes a study of fundamental world changes that have resulted in the past three hundred years from scientific discoveries. Topics considered are the following: a background of the beliefs and practices of the age; the processes of thought which produced skepticism; the experiments devised to disprove ruling opinions; the new concepts arising from fresh evidence; and the social, economic, and philosophic adjustments following the discoveries.

Stress is given to the nature of scientific inquiry, its cumulative nature, its desire for freedom, and how to judge the probable fruitfulness of a research problem. The role the man of science occupies in the world today is contrasted with his counterpart in earlier centuries. Demonstrations of historical experiments, readings in the original literature, and lectures and discussions are employed.

Credit: 2 semester-hours

#### Science 419. Field Science and Conservation

In this course students study phases of field science which are related to conservation. The components of soil and water which produce good crops are studied. Students gain an understanding of farm practices by visiting several nearby farms. Forest and wood-lot management, wildlife preservation, mineral resources use, and other important areas in which science influences the conservation of natural resources are investigated.

SCIENCE 111

## Science 420. Water Supply and Conservation Problems

This course is designed to provide students with an opportunity to do an extensive study of the water supply problems in New Jersey and surrounding states. A study of water tables, rainfall, irrigation, drainage, flooding, water-shed management, stream pollution, and soil erosion, gives students a background for understanding the problems involved in domestic and industrial use of water. State and regional water conservation projects such as Incodel, Passaic Valley Flood Control, and Stoney Brook Water-shed are studied. Teaching materials are supplied, and methods of presenting this material to elementary and secondary pupils are demonstrated and discussed.

Credit: 3 semester-hours

### Science 421. Water Analysis and Purification

This course covers the phases of water inspection, analysis, and purification of value in safeguarding public and private water supplies, and in securing potable water from questionable sources. The work consists of class discussions, field trips, and laboratory experiences. Field trips are to water purification plants, sewage disposal plants, and board-of-health laboratories. The laboratory work is divided between the fields of chemical and bacteriological analysis of water. The necessary bacteriological background is developed in the course. Chemical analysis includes tests for harmful impurities and hardness.

Prerequisite: General college chemistry

#### DEPARTMENT OF SOCIAL STUDIES

The teacher of social studies works in a field the boundaries of which are constantly changing and expanding. The necessity for constant study, especially with regard to the contemporary social situation and its problems, presses upon every secondary school teacher of the social studies. The Social Studies Department at Montclair intends to provide for such teachers courses of an advanced character which will help to keep them abreast of the changes in a changing society and a complex world. It also provides advanced courses for those teachers who wish to increase their preparedness in specialized secondary school subjects. Finally, it aims to provide for the teacher-in-service an opportunity for keeping informed concerning the changing techniques and problems of teaching the social studies. Selections from advanced courses of the sort just described lead to the Master's degree in the social studies.

In order to qualify for the Master's degree in social studies, candidates either prepare a thesis or pass an oral examination based upon a selected field of research.

#### Requirements in the Social Studies Department

In general, a candidate must offer thirty-two hours of graduate credit, at least eighteen of which must be in the field of Social Studies, six in the field of Education, and six or eight (depending upon the number of social studies credits required) elective credits in fields closely related to the social studies. The following are the more specific requirements:

- All candidates must take the seminar course, Social Studies 600.
- II. The remaining social studies courses should represent a diversified choice from among the following fields:

Ancient and Medieval History Social Studies 423, 425, 427

Modern European History Social Studies 441, 457, 458, 493

United States History
Social Studies 408, 413, 438, 447, 471, 474, 475, 480, 502, 518

The Americas
Social Studies 435, 440

Anthropology
Social Studies 445A, 445B, 448, 540, 541A, 541B, 542

International Affairs
Social Studies 412, 432, 442, 451

Economics Social Studies 446, 456, 517, 522, 523, 524, 525

Social Studies 443, 477, 482, 494, 512, 513

Political Science Social Studies 402, 433, 437, 515

Educational Techniques
Social Studies 503

Credits may also be chosen to the amount of six from the offerings in Field Studies.

- III. All candidates must take the course, EDUCATION 503—Methods and Instruments of Research, and four elective credits in education selected in consultation with the Social Studies Department Chairman.
- IV. Elective credits in fields other than the social studies should be selected in consultation with the Social Studies Department Chairman.
  - V. Master's Thesis or Research Paper

All candidates are required to complete either a Master's thesis or a Master's essay on a question or problem which has been chosen by the candidate and approved as a proper topic for his specialization. This project is generally initiated in the seminar course, Social Studies 600. The candidate is later given an oral examination on the paper before a seminar of members of the Social Studies Department. Complete directions for this requirement may be obtained from the Chairman of the Department.

In the case of candidates offering undergraduate majors from institutions other than Montclair, it may be necessary to make more specific requirements with respect to choices among social studies and elective credits than is indicated above in order to fill gaps which may exist in the undergraduate major.

#### GRADUATE COURSES

## Social Studies 502. The Origin and Development of the American Constitution

This course is an intensive study of the origin and framing of the Constitution of the United States. It aims to search out the roots and influences that determined our basic political institutions. The seminar method is employed and attention is given to the techniques of historical research and historical writing.

Credit: 2 semester-hours

## Social Studies 503. Modern Social Studies Instruction and Supervision

This course is designed primarily to assist teachers and supervisors to obtain a comprehensive view of recent curriculum trends, current subject-matter tendencies, professional literature, and problems of the teacher and the supervisor, and newer practices in secondary school social studies.

Credit: 2 semester-hours

## Social Studies 512. Social Legislation

This course analyzes the social, economic, and political adjustments which have come about in our society due to technological progress.

Credit: 2 semester-hours

#### Social Studies 513. Intercultural Relations

This course is designed as a critical examination of the cultural reasons for many of the irritations which have created many of the tension points in the world today. It is designed to go beneath the historical causes for many of the problems around the world and to examine how subtle factors have been at work and how revolutionaries have made effective use of them to create tensions at various spots throughout the world. The course examines in detail the nature of these irritants and subtle forces in these tension spots and attempts to evaluate their effectiveness. It synthesizes anthropological, psychological, political, and historical findings from recent research in these fields.

Credit: 2 semester-hours

## Social Studies 515. History of Political Thought

The major theories of representative political philosophers concerning the nature, functions, organization and sovereignty of the state are

studied in this course. Among those discussed are: Plato, Aristotle, Cicero, Thomas Aquinas, Machiavelli, Luther, Calvin, Bodin, Hobbes, Locke, Spinoza, Montesquieu, Rousseau, Hume, Bentham, J. S. Mill, Burke, Hegel, Marx.

Credit: 2 semester-hours

#### Social Studies 517. Money and Banking

An opportunity is provided for an analysis of the monetary and banking principles and practices basic to modern economic organization. Special attention is directed to an examination of the functioning of the Federal Reserve System in relation to the gold standard, a managed currency, stability, inflation and deflation.

Credit: 2 semester-hours

# Social Studies 518. Recent Trends in American History (1918 to the Present)

Without attempting to reach final conclusions, this course analyzes the major problems which have influenced American life since World War I. The new position of the nation in world affairs, the modifications of the old economic order, the progress of social and political change are all surveyed.

Credit: 2 semester-hours

## Social Studies 522. The Development of Economic Institutions and Ideas

The doctrines of the more important schools of economic thought are emphasized, and the teachings of the Mercantilists, Physiocrats, Adam Smith, Malthus, Ricardo, Marx, Henry George, Veblen. Hobson, Commons, Keynes, and others are examined in relation to the important problems of money, credit, prices, business cycles, foreign and domestic commerce, property, wages, the nature of wealth and value, and economic planning.

Credit: 2 semester-hours

## Social Studies 523. The Economics of the Business Cycle

The purpose of this course is to consider the nature of business cycles and their impact on the national economy, to survey business cycle theories, and to analyze the significant proposed methods of control for the purpose of developing a desirable public program conducive to economic stability.

### Social Studies 524. The Economics of Public Fiscal Policy

Consideration is given to the various theories of justice in taxation: the incidence and shifting of the tax burden; the constitutional aspects of government finance; fiscal policy and full employment; taxation and economic inequality; the economics of public borrowing; and management of the national debt.

Credit: 2 semester-hours

## Social Studies 525. Workshop on Economic Education

This workshop is designed to provide teachers, supervisors, and administrators with a better understanding of the American economy and its operation. Instruction is given by a staff of economists and curriculum specialists, supplemented by businessmen, labor leaders, and representatives of agricultural groups.

Credit: 3 semester-hours

#### Social Studies 535. Russia in the Modern World

Particular attention is devoted to the role played by the geographical and historical forces that have influenced Soviet foreign policy. The institutional apparatus is considered, with emphasis given to the special functions performed by such agencies as the press, the schools, and the agricultural collective. In appraising the development of Soviet foreign policy, the focus is on relations with the United States, the Soviet Union in the United Nations, and the emergence of Soviet interests in the Far East, the Middle East, and Africa.

Credit: 3 semester-hours

## Social Studies 540. Living Races: In the Company of Man

This course presents a study of the physical anthropology of race: human origins; the history of racial evolution; and racial types in the modern world. The facts of race are utilized as the basis for studying race relations in contemporary society, as well as for clarifying misconceptions concerning race and intelligence, race and culture, and other related factors.

Credit: 2 semester-hours

## Social Studies 541A. Applied Anthropology and the Professions, Part I

This course considers the selection and application of anthropological data for dealing with problems of contemporary life. Part I of the course presents a survey of applied anthropology *prior* to World War II. It includes consideration of early problems of theory and method in anthropology; the use of anthropology in colonial adminis-

tration; and applications of anthropology in industry, Indian affairs, psychological warfare, and in the work of the United Nations.

Credit: 2 semester-hours

## Social Studies 541B. Applied Anthropology and the Professions, Part II

This course presents a study of applied anthropology since World War II. Emphasis is placed upon the relevance today of anthropological knowledge in the professions; e.g., the practical contributions of anthropology in the fields of education, human relations, health, technical assistance, and child growth and development. Problems of culture change, inter-cultural communication, cultural diversity in our schools, etc., are covered in workshop sessions utilizing school and community resources.

Credit: 2 semester-hours

## Social Studies 542. Africa, South of the Sahara

The peoples and environment of Africa are studied as the basis for understanding changes taking place on the African continent today. Attention is focused on Africa's physical types, climate, history, and cultural traditions, with special emphasis being placed on culture contacts and change, and their effects on Africa, South of the Sahara.

Credit: 2 semester-hours

## Social Studies 600. Social Studies Research Seminar

This seminar course is designed primarily to provide an opportunity for graduate students in the social studies to investigate and apply the techniques of research in the social studies field. Each Master's Degree candidate has an opportunity to explore materials and select an appropriate research topic for intensive study. The completed project must be presented to the social studies faculty for final evaluation and official approval no later than two months prior to the expected date of graduation.

#### SENIOR-GRADUATE COURSES

For more complete descriptions see the undergraduate catalog.

## Social Studies 402. Comparative Governments

This course offers students an opportunity to study the political systems of the major world powers. In each instance, political institutions are viewed against their economic and social backgrounds. Frequent comparisons are drawn between the American federal government and the foreign governments considered in this course.

Credit: 3 semester-hours

### Social Studies 408. A History of New Jersey

This course is designed to assist teachers in acquiring a better knowledge of their state. A study is made of the history of New Jersey from the point of view of the social, political, economic, and cultural development of the people from the beginning of the settlement to the present. Special attention is given to the geographical and industrial aspects of the state, and the place of New Jersey in the national setting.

Credit: 2 semester-hours

#### Social Studies 412. International Government

The attempts of the international community of states to express itself in a formal world organization are the subject of this course. The agencies which have been established to deal with international legislative, executive, administrative, and judicial problems are studied.

Credit: 3 semester-hours

## Social Studies 413. Economic History of the United States

The trends and movements in agriculture, finance, commerce, manufacturing, transportation, community and industrial relations are traced from their beginnings in the colonial period to contemporary times.

Credit: 2 semester-hours

#### Social Studies 423. Classical Civilization

This course traces the social changes in Rome from the earliest times to the end of the Western Roman Empire. Attention is directed to the earliest features of Roman civilization and to the changes—political, social, and economic—resulting from Etruscan, Carthaginian, and Greek influences.

#### Social Studies 425. Medieval Civilization

This course examines the origins and development of Medieval civilization in Western Europe from the decline of Rome to about 1350. Study is made first of the Early Middle Ages, including the conversion of Europe to Christianity, monasticism, feudalism and manorialism. Emphasis then turns to the emergence of a distinct civilization by the 12–13th Centuries: the development of towns and trade, a powerful Church, dynastic monarchies, universities, art, literature and philosophy. An analysis is made of the relation of Medieval civilization to the subsequent civilization of the Renaissance.

Credit: 2 semester-hours

## Social Studies 432. The Twentieth Century World

This course is designed to emphasize a topical consideration of significant movements, events, and personalities of the Twentieth Century. Trends and topics to be studied include an historical background of the major political "isms" of the period, scientific and technological advances, social forces, economic theories and experiments. Considerable thought is given to specific contemporary problems facing the world, especially those emerging nations of Asia, Africa, and South America.

Credit: 2 semester-hours

## Social Studies 433. American Political Thought

This course deals with contemporary trends and theories as they have emerged from social and economic conditions and as they are founded upon the bases laid down by Hamilton, Madison. Washington, Jefferson, Marshall, Calhoun, Webster, Lincoln, and Wilson.

Credit: 2 semester-hours

## Social Studies 435. Development of Latin America

This course deals with Latin America from the pre-Columbian era to the end of the wars of independence. Stress is placed upon the geographical background, and the development of the Maya, Inca. and Aztec civilizations. After considering the Spanish and Portuguese backgrounds of the Latin-American people, consideration is given to the European cultures established in the New World.

Credit: 3 semester-hours

## Social Studies 437. The Political Party System in the United States

Among the topics discussed are: party organization, the political boss, the political machine, party finances, the process of voting, elec-

tion laws, primaries, conventions, platforms, presidential elections, majority rule, the development of the party system, sectional politics, the farm vote, the labor vote, and the future of party government in the United States.

Credit: 2 semester-hours

### Social Studies 438. The Literature of American History

The purpose of this course is to familiarize the student with the writings and sources of United States history. Social, economic, political, geographic, and other interpretations are studied and compared. The writings of a selected group of representative American historians are examined.

Credit: 2 semester-hours

#### Social Studies 440. Modern Latin America

This course is designed to give an understanding of the economic, social, and political character of contemporary Latin-America. This may be considered as an area study in that geographical factors are given great emphasis, along with political considerations. The history of these nations from their wars of independence to the present serves as background for the present state of affairs in this region.

Credit: 3 semester-hours

## Social Studies 441. Economic History of Europe

The study of Europe from an economic point of view is particularly important in the light of present European problems and their relation to world-wide conditions. This course is a survey of the economic life and development of Europe from the emergence of the ancient civilizations to the beginning of the modern economic world.

Credit: 2 semester-hours

## Social Studies 442. The Far East

A study is made of the economic, social, and cultural situation of the Far East, with particular emphasis on the historical background of China and Japan, and of our relations with the Philippines. Oriental folkways, religion, education, population shifts, and strategic questions are discussed. This course provides an approach to the problems the United States must face in the Far East.

#### Social Studies 443. Youth and the Community

This course is a sociological study of youth in its many relations to the community. Special attention is given to problems which arise in the relationship of youth and the community; e.g., juvenile delinquency, conditions contributing to maladjustment. poorly adjusted children, and educational and social agencies active in solving youth behavior.

Credit: 2 semester-hours

### Social Studies 445A. Introduction to Anthropology

This course provides an introduction to anthropology as a field of knowledge. It surveys the biological background of culture; the prehistoric development of culture; the culture concept; and the universals of culture—i.e., material culture, social and political organization, education, religion, language, and art and play.

Credit: 2 semester-hours

### Social Studies 445B. Introduction to Anthropology

This course is a continuation of the study of anthropology as a field of knowledge. Among the topics considered are cultural variability; the cultural backgrounds of personality development: the life crises; the dynamics of culture change; and cultural perspectives in the modern world. A brief review of basic concepts is included for students new to the study of anthropology.

Credit: 2 semester-hours

## Social Studies 446. Current Problems in Economics and Government

This course is designed to analyze the relationship of economics to government. The causes and results of governmental activity are discussed in the light of their economic significance and their bearing on public welfare.

Credit: 2 semester-hours

## Social Studies 447. Diplomatic History of the United States

The purpose of this course is to show how we have become gradually conscious of our world interests and responsibilities, and the important role we have come to play in international politics. The growing concept of world democracy as opposed to commercial and military imperialism is stressed.

#### Social Studies 448. Cultural Diversity

The study of primitive and folk cultures is seen in contemporary perspective. The purpose of this course is to increase student awareness of the range and variety of cultures in today's world, and to improve understanding of factors which account for cultural diversity and variability.

Credit: 2 semester-hours

#### Social Studies 449. South Asia

Designed to give an understanding of political, economic, social, and cultural problems of contemporary South Asia, emphasis is given to post-World War II domestic problems of India, Pakistan. Ceylon and their international relations with the world community.

Credit: 3 semester-hours

#### Social Studies 451. The Middle East

This course is a survey of Indian and Moslem civilization. It shows that economic and political changes alone do not suffice to adjust the peoples of the Middle East to Twentieth-Century civilization, and that many cultural traditions must vanish while some forgotten features of the past are to be revived. Post-war planning for the region from the Near East through Persia, India, Burma, Thailand, and Malaya to the Netherland East Indies is discussed.

Credit: 3 semester-hours

#### Social Studies 456. International Economic Relations

This course considers the significance of international trade and exchange to the economic life of our nation and the world economy. An analysis of the contrasting economic philosophies relating to international economic organization is made. Special emphasis is given to those policies which tend to promote freer trade, including classical doctrine of comparative costs, the Reciprocal Trade Agreements Act, and the International Bank and Currency Stabilization Fund.

Credit: 2 semester-hours

## Social Studies 457. Development of Russia

Factors which shaped the Russian people are emphasized. An account is presented of Soviet internal organization, Sovkhoz, Kolkhoz, and the Five-Year plans. In addition to the historical background, Russia's great writers are discussed in the light of social and political developments.

#### Social Studies 458. Russia as a World Power

An analysis of Russia's relations with China, Iran, Turkey, the European continent, England, and the United States is presented. Marxist world policy, as interpreted by Kautsky, Plekhanov, Jaures, Bukharin, Trotsky, Lenin, and Stalin is described. The changing views of the Second and Third Internationals, and the organization and methods of the Comintern are discussed.

Credit: 2 semester-hours

#### Social Studies 471. The United States Since World War I

The course presents an overview of the significant developments, economic, social, cultural, scientific, political, intellectual and international, that have characterized our national scene since World War I.

Credit: 2 semester-hours

### Social Studies 474. America in Transition

This course surveys rapidly the results of the Civil War and then emphasizes the major trends, economic and social, which have made modern America. It is intended as a more advanced study than that which is made in the undergraduate course. The period covered is from 1867 to around 1914.

Credit: 2 semester-hours

## Social Studies 475. The History of American Thought

This course considers the influential thinking in America to understand how uncertain ideas or trends of thought have grown out of situations and have in turn helped to mould the course of our history. The writings and discourses of important American thinkers are considered including Mather, Paine. Jefferson, Emerson. Thoreau, and Veblen.

Credit: 2 semester-hours

## Social Studies 477. Rural Sociology

During this course the student comes face to face with rural life in northern New Jersey. Social processes and problems are considered. Opportunities are provided for students to attend Grange meetings, county fairs, rural dances and parties, and to live for a day or two with a farm family.

## Social Studies 480. Social History of the United States

This course presents a study of the social and cultural aspects of American history. As such, it supplements but does not take the place of economic and political history. The course considers population movements and growth, rural and urban social problems, status of women, family life, utopian ventures, mass media of communication, amusements and recreation, and human rights.

Credit: 2 semester-hours

#### Social Studies 482. Conservation and Rural Economic Life

This course provides for a study of one of the basic economic problems in America today. Land use, farm loans, price support of farm products, increased acreage production, conservation practices, are among the topics studied to give the student a better understanding of the relationship between rural and urban living.

Credit: 2 semester-hours

### Social Studies 483. Modern Approaches to Social Problems

This course is designed to acquaint students with techniques and practices developed in recent years for a scientific approach to problems of human relationship. Techniques to be studied include: sampling techniques for testing large groups, questionnaires, interviewing techniques, objective observation of cultural patterns, objective observation in control laboratory situations, sociometrics, role-playing techniques, attitude testing, and use of semantic analysis in test construction.

Prerequisite: An introductory course in sociology or special permission of the instructor

Credit: 2 semester-hours

## Social Studies 493. Western Europe Since World War I

This course presents an outline of the rise of communism and facism and the reaction of western democracies to these movements. The Civil War in Spain, the Munich Pact, the failure of the League of Nations, diplomatic events of the World War II era, United Nations problems, the North Atlantic Pact, and special problems of western defense are emphasized. An evaluation of western Europe's significance for the United States is attempted.

### Social Studies 494. Social Studies and Conservation

Everyday problems of living as they are related to and affected by the wise use of our natural resources are studied in this course. The student learns about the renewable resources, soil, water, forests, and wildlife, as well as the non-renewable resources, minerals, oil, and coal. Economic, social, community, national, and individual problems are approached by giving the student firsthand experiences gained through extensive field trips in northern New Jersey. This course is of particular interest to social studies and elementary school teachers but also forms an excellent experience background for all educational fields. Methods of teaching, courses of study, and teaching units are developed.

Credit: 2 semester-hours

#### FIELD STUDIES IN AMERICAN LIFE

### Social Studies 460. Central Eastern Region

This fifteen-day tour of Pennsylvania, Maryland, Virginia, West Virginia, North Carolina, and Tennessee covers the major points of historic interest associated with the Colonial Period, the American Revolution, and the Civil War, and the geographic features of the coastal plain, the Piedmont, the Great Valley, and the Appalachian Mountains in these states.

Credit: 3 semester-hours

## Social Studies 461. New England and French Canada

This field-study course gives an opportunity to study by direct observation the historical and geographical features of New England and the Province of Quebec. This trip, occupying the twelve days immediately following the summer session, is made in a modern chartered motor coach with overnight stops at first-class hotels.

Credit: 3 semester-hours

### Social Studies 462. Continental United States

This field-study course consists of sixty-two days of directed travel, including all of July and August, and provides an opportunity for gaining an integrated view of our country as a whole. All important geographic and historical features are studied under the instruction of members of the college faculty and local specialists.

### Social Studies 466. Puerto Rico and the Virgin Islands

This is a nine-day field-study course devoted to a survey of our nearest island possessions. It includes an exploration of San Juan and its vicinity, including the University, the rain forest and the submarine gardens, a two-day trip through the island visiting pine-apple, coffee, sugar, textile, and rum producing areas, churches, homes, and historic places. One day is spent in St. Thomas, largest of the Virgin Islands. The trip to and from the islands is made by air.

Credit: 2 semester-hours

#### Social Studies 467. Florida

This is a field-study course covering the Florida peninsula including both coasts, the Everglades, and the Lake Region. Among the places visited are ancient St. Augustine; the winter playgrounds at Palm Beach and Miami; the Tamiami Trail through the Everglades; the west coast cities of Sarasota, St. Petersburg, and Tampa; and the Lake Region in the neighborhood of Lake Wales and Orlando. The trip affords opportunity for topographical, historical, and industrial studies.

Credit: 2 semester-hours

## Social Studies 469. Mexico

This field-study course aims to give a comprehensive view of contemporary Mexican life with its geographic, economic, historic, and cultural and artistic setting. Transportation to and from Mexico City is by air and in Mexico by private cars. Places visited include Xochimileo, Acolman, Teotihuacan, Fortin, Pueblo, Oaxaca, Guadalajaro, Quertero, Guanajuato, Patzcuavo, San Miguel de Allende, San Jose, Purua, Morelia, Toluca, Taxco, and Cuernevaca.

Credit: 3 semester-hours

## Social Studies 481. The West Indies

This course consists of ten days of directed travel in countries in the Caribbean. Transportation is by air and private car. Opportunities are given for study of geographic, historic, economic, and cultural phenomena in Puerto Rico (one day), Santo Domingo (two days), Haiti (two days), Jamaica (two days), Cuba (two days), visiting San Juan, Cuidad Trujillo, San Cristobal, Port au Prince, Kenscoff, Kingston, Havana, and rural areas in all countries.

## Social Studies 484. Gulf Coast and Lower Mississippi Valley

This is a field-study course covering the Gulf Coast from Mobile to New Orleans. It surveys economic, geographic, and historical aspects of the lower Mississippi Valley. Some places visited are Mobile, Biloxi, New Orleans, Baton Rouge, Natchez, Vicksburg and Jackson.

Credit: 2 semester-hours

#### Social Studies 485. Maritime Provinces of Canada

This is a twenty-one day field-study course covering Nova Scotia, Cape Breton Island, New Brunswick, and the Gaspe. The route runs through Vermont and Quebec to the Gaspe. The history of the conflicts between the French and the English for this territory, varied geographical and scenic phenomena, and customs and daily life of French Canadian and English-speaking people of the region are observed.

Credit: 3 semester-hours

### Social Studies 486. World Survey

This is a thirty-five day field-study course planned to give the student a general comprehensive vision of the kind of a world we live in with its varying culture patterns and problems. The itinerary covers the Tokyo and Kamakura area in Japan; Manila and its environs in the Philippines; Hong Kong, and the Kowloon Peninsula in southeast China; Bangkok in Thailand, Calcutta, Delhi, Agra and Bombay in India; Cairo and Memphis in Egypt; Jerusalem and Damascus in the Holy Land; Baalbeck and Beirut; Istanbul; Athens and Corinth; and Rome.

Credit: 4 semester-hours

## Social Studies 487. Field Studies in the Arts: European Civilization

This field-study course gives an opportunity to study by direct observation the development of European culture from ancient Greco-Roman civilization to modern times. It deals with Byzantine, Roman-esque, Gothic, Renaissance, Baroque, and Rococo architecture and art and changes in art forms to modern times. The spectacular rise of European music since the Renaissance forms an important part of this study. The close relationship between the arts and historical and social changes in European civilization is examined.

#### Social Studies 488. Hawaii

This is a twenty-day field-study course. It covers the islands of Oahu, Hawaii, Maui, and Kauai and investigates all of the major geographic, historic, economic, and cultural features of the islands. Among the high points are Honolulu and its environs.

Credit: 3 semester-hours

#### BACKGROUND STUDIES IN AMERICAN LIFE

## Social Studies 492A and B. Studies in American Life—The East and the West

These courses comprise a unit dealing with the United States as a cultural, historic, geographic, economic, social and political unit and, at the same time, an appreciation of regional differences wihch characterize American unity and diversity.

The subject matter of Social Studies 492A covers New England, the Central East, the South, and the Middle West east of the Mississippi River. The subject matter of Social Studies 492B deals with the regions west of the Mississippi.

#### THE DEPARTMENT OF SPEECH

Speech education in the schools of New Jersey has received increasing recognition in recent years with the conviction that effective oral communication is important to the achievement of self-realization, vocational competency, social effectiveness, and good citizenship. Additional programs of speech are being established to provide developmental and corrective work according to each student's needs. The effectiveness of these programs depends upon the sound and extensive preparation of master teachers who can organize and supervise speech programs and who can offer dynamic leadership in helping to integrate the speech program in the over-all school curriculum.

The graduate program in speech allows qualified students to specialize in one of two areas of speech education: speech and dramatics, or speech and hearing rehabilitation. The candidate may also, through his choice of elective courses, strengthen his competencies in both areas.

It is expected that each graduate student will have at least one of the following goals for his work:

- 1. To be the director or supervisor of a speech education program in the elementary and secondary schools of a community.
- 2. To be further qualified as a speech therapist in schools and special institutions.
- 3. To increase his skill as a teacher of speech and dramatics in secondary schools.
- 4. To provide opportunities for the completion of requirements for certification in the state and in the national professional organization, the American Speech and Hearing Association.

In order to matriculate as a candidate for the Master of Arts degree in Speech, the applicant must have completed a minimum of eighteen semester-hours of course work, or the equivalent, from among the following areas:

Voice production; fundamentals of speech

Phonetics

Speech correction; speech pathology

Anatomy and physiology of the vocal and auditory mechanisms

Speech laboratory practice; clinical practicum in speech

Oral interpretation; choral speaking

Public speaking; group discussion

Theater Arts

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Each student must also be capable of setting a good example of acceptable speech. Each candidate will be interviewed by a speech faculty committee; if any speech deficiencies are noted, the candidate must correct them prior to matriculation, or accept matriculation on the condition that such correction will be made one year before the granting of the degree.

### Requirements for the M.A. Degree in Speech

Upon admission to the graduate program in speech, the student must declare his area of specialization: (1) speech and dramatics, or (2) speech and hearing rehabilitation. Each student must spend at least one summer in full-time study in the seminar course in his area of specialization.

1		Semester
I.	Professional Education Requirements  Education 503. Methods and Instruments of Research Other education courses — to be chosen by the	Hours 2
	student in consultation with his adviser	4
	Total	6
II.	Required of All Speech Majors	
	Speech 550. Advanced Study of Voice and Speech Production.  Speech 592. Areas and Techniques of Research in Speech (3)	3
	Or	2 or 3
	Education 603. Principles and Practices of Research (2)	
	Total	5 or 6
III.	Areas of Specialization	
	A. For Students Specializing in Speech and Dramatics	
	Speech 567. Seminar in Dramatic Production	6
	Speech 462. Group Discussion and Leadership (3) or	
	Speech 470. Argumentation and Debate (3)	
	Speech 565. Advanced Oral Interpretation  One course in speech and hearing rehabilitation  Electives (chosen by the student in consultation with his	
	adviser)	
	Total	20 or 21
	B. For Students Specializing in Speech and Hearing Rehabili- tation	
	Speech 535. Seminar in Speech and Language Rehabilita- tion	6
	One course in audiology Speech 411. Advanced Speech Pathology (3)	
	or	3
	Speech 412. Speech Diagnosis (3)	

One course in speech arts Electives (chosen by the student in consultation with his	2 or 3
adviser)	5 to 8
Total	20 or 21
Grand Total	32

#### IV. Additional Requirements

- A. Written comprehensive examination
  Oral comprehensive examination, if necessary, to supplement the written examination
- B. Oral demonstration of communication skill—The speech faculty will arrange a committee to observe each candidate as he participates in a professional activity or program of at least thirty minutes in length. The nature, time, and place of the activity will be of the student's choosing, prior to his final semester. It may be in the form of a speech at a Parent-Teacher Association meeting or at a professional convention, a reading, a dramatization, or any combination which demonstrates the candidate's ability to exemplify good speech, and to be effective before an audience.

#### **GRADUATE COURSES**

## Speech 522. Advanced Phonetics

Skill in the use of phonetics is developed further in recognizing and distinguishing acceptable English speech sounds, deviant speech sounds, regional variations in standards of American English, and sounds in foreign languages. Additional study is devoted to the stress, phrasing, and intonation patterns used in speaking English, with some analysis made of these elements in other languages.

Prerequisite: Speech 104 or equivalent

Credit: 2 semester-hours

## Speech 531. Advanced Audiology

The purpose of this course is to increase skill in administering tests for determining pure-frequency and speech reception thresholds. Emphasis is placed on evaluation and interpretation of test results and on the analysis of client histories. Principles and techniques of hearing aid evaluation, measurement of recruitment, and tests for psychogenic deafness and malingering are studied. Consideration is also given to pre and post-surgical audiometry, and to the special problems of differential diagnosis in testing children.

Prerequisite: Speech 468 or a basic audiology course

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## Speech 532. Practicum in Speech Rehabilitation

This course provides advanced students with the opportunities for the practical application of diagnostic and rehabilitative techniques with children and adults who have major speech and language problems. Qualified students participate in specialized laboratory experiences which include planning and supervising speech therapy sessions, providing rehabilitative services to individuals and small groups, interviewing applicants, and administering audiometric tests.

Prerequisite: 60 clinical hours in speech practicum

Credit: 2 semester-hours

### Speech 533. Supervising Speech Correction Programs

Methods of organization and administration of the speech correction and improvement programs are discussed. Emphasis is placed upon problems of screening, referral, speech-staff training and orientation, in-service courses, parent and community relations, integration with other disciplines, and development of new materials for testing, teaching, and evaluating.

Credit: 2 semester-hours

# Speech 534. Advanced Anatomy and Physiology of the Vocal and Auditory Mechanisms

The basic anatomy of the mechanisms of speech reception and expression is reviewed. Consideration is also given to the integrated functioning of the central nervous system, the automatic nervous system, and the endocrine system. The effects of abnormalities of structure and function of the speech and hearing processes are emphasized. Discussion includes the medical and surgical aspects of rehabilitation, and the hygiene of the ear, nose, and throat. Demonstrations and supervised laboratory dissections are included.

Prerequisite: Speech 208 or equivalent

Credit: 3 semester-hours

## Speech 535. Seminar in Speech and Language Rehabilitation

Graduate speech majors specializing in the speech sciences are required to devote one summer session to the study of speech and language disorders and to participate in the therapy program of the Speech and Hearing Center. Emphasis is placed upon the diagnostic, therapeutic, and evaluative techniques employed in working with children and adults who have speech disorders of organic etiology.

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A minimum of 135 clock hours of supervised teaching must be accumulated.

Prerequisite: Speech 410 or equivalent

Credit: 6 semester-hours

## Speech 550. Advanced Study of Voice and Speech Production

The study is made of materials and methods used in the teaching of speech fundamentals on the junior high and senior high school levels. Review and further application of basic subject matter, including English and comparative phonetics, are stressed. Opportunities are provided for practice in improving or further developing personal voice and speech skills, in directing the practice of students with minor speech difficulties, and in phonetically transcribing speech from phonograph records or tape recordings. Some consideration is given to methods of helping students, for whom English is not a native language, to improve their voice and speech.

Prerequisite: Speech 100D or Speech 103 or equivalent

Credit: 3 semester-hours

### Speech 563. Scenery Design and Construction

This course is designed to extend the advanced speech student's knowledge in scenery design and construction techniques. Special emphasis is placed upon stage design as related to the play, the director, and the audience. The course of study includes a survey of the styles of design and the use of the perspective sketch and stage model in planning the stage setting. The application of stage construction techniques is used to demonstrate the necessity of scene design in planning the stage production. Each student is expected to design and plan the construction of scenery for a play appropriate for production in a secondary school.

Credit: 3 semester-hours

## Speech 564. History of the Theater

This course is designed to give the advanced speech student a comprehensive view of the development of the theater from the Classic Greek drama through the Nineteenth Century. Special attention is placed upon plays and playwrights of the period, theater architecture, scenery, costuming, and styles of acting and presentation of each period. Course work includes oral reports, lectures, and classroom demonstrations. Advanced students may enroll with the consent of the instructor.

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### Speech 565. Advanced Oral Interpretation

This course is designed to provide further study of techniques in interpretation of poetry and prose. Extensive practice is provided in the analysis, presentation and of various types of literary material (short story, ballad, narrative, sonnet, etc.) suitable for use in the classroom and for special programs.

Prerequisite: Speech 106 or equivalent

Credit: 2 semester-hours

### Speech 566. Costume and Make-up for the Stage

This course provides the advanced student with opportunities to design costumes and make-up for plays of various periods. Consideration is given to the use of materials, colors, and textures in achieving desired effects on the stage. Laboratory work is provided to develop skill in creating a wide variety of make-ups.

Credit: 3 semester-hours

#### Speech 567. Seminar in Dramatic Production

This seminar is for advanced play-production students. It allows each member of the class to pursue projects in keeping with his own needs or interests in both the technical and directorial aspects of play production. When possible, supervisory assignments are made in connection with the current program of plays. The seminar meets a minimum of four hours daily for individual project or laboratory activities, for evaluation of specific teaching problems in connection with the current plays, and for group analysis of typical production problems. Enrollment is open to matriculated graduate students in speech, or by permission of the instructor.

Credit: 6 semester-hours

## Speech 590. Problems in the Teaching of Speech

This course is designed to present an analysis and investigation of the problems encountered in the speech classroom, and to survey the textbooks and teaching aids available to the teacher of speech on various grade levels. Consideration is also given to the problems of (1) motivation, (2) methodology, (3) evaluation procedures, and (4) co-curricular speech activities.

Credit: 3 semester-hours

## Speech 591. Organization and Administration of the School Speech Program

This course deals with the problems of organizing and administering a comprehensive speech program in a school system. Considera-

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tion is given to curriculum development, teacher-administration relationships, class scheduling, reports and records, in-service training, and integration of the speech program in the total school curriculum.

Credit: 2 semester-hours

## Speech 592. Areas and Techniques of Research in Speech

Methods of research appropriate for studies in speech are analyzed. Significant problems in the field are investigated and discussed, and published research projects are evaluated. Special attention is given to the problems of locating and utilizing professional journals and other publications for research. Each student is required to prepare an outline for a research project, to develop a bibliography, and to complete the research study.

Prerequisite: Education 503.

Credit: 3 semester-hours

#### SENIOR-GRADUATE COURSES

## Speech 410. Speech Pathology

This course presents a study of the etiology and pathology of major language and speech disorders which may result from organic, functional, or emotional disturbances including severe stuttering, dysphonia, laryngectomy, cleft palate, cerebral palsy, and aphasia. Emphasis is placed upon diagnosis, evaluation, and rehabilitation.

Prerequisite: Speech 208, 209, or the equivalent

Credit: 2 semester-hours

## Speech 411. Advanced Speech Pathology

The purpose of the course is to provide further study and evaluation of modern techniques of speech rehabilitation, and to review research findings in the areas of voice, articulation, rhythm, and symbolization disorders. Consideration is given to the ways in which speech rehabilitation may be integrated with related health services and educational services in schools and special centers.

Prerequisite: Speech 410 or equivalent

Credit: 3 semester-hours

## Speech 412. Speech Diagnosis

The purpose of this course is to analyze and evaluate popularly employed techniques of speech diagnosis. Commercially available diagnostic tools, as well as tests that may be designed by the therapist to meet specific needs are discussed. Consideration is also given to 136 Speech

the dynamics of interviewing and to the reporting and interpreting of client histories. Specific methodology to be used in providing speech rehabilitation services to children and adults with speech and language disorders is evolved.

Prerequisite: Speech 410 or equivalent

Credit: 3 semester-hours

#### Speech 435. Stagecraft

This workshop course provides training in constructing and painting of scenery, and lighting the stage. A minimum of twelve clock hours in the scene shop is required, in addition to the regular class sessions.

Recommended prerequisite: Speech 105A or the equivalent

Credit: 2 semester-hours

### Speech 436. Fundamentals of Stage Lighting

The purpose of the course is to analyze the functions of light on a stage and to study and use the instruments available to achieve desired effects. Optimum and minimum equipment are studied. The laboratory work is done in the Memorial Auditorium at the College, which houses modern and flexible stage lighting equipment, and in a small auditorium with limited facilities. Students are encouraged to apply the principles of stage lighting to the specific auditoriums in which they may work. Appropriateness of lighting for different types of stage activities is a fundamental consideration in the course.

Prerequisite: Speech 105A or Speech 435 or permission of the

instructor

Credit: 3 semester-hours

## Speech 437A. Dramatic Production Workshop

This course is designed for those students desiring a comprehensive introduction course in theater production. Special emphasis is placed upon stagecraft and lighting. Participation in costuming and house-management activities are included. The course may be used as partial fulfillment of the requirements of the undergraduate speech major or minor in lieu of Speech 105A, or as a prerequisite to matriculation for the Master's degree in speech.

Credit: 2 semester-hours

## Speech 437B. Advanced Dramatic Production Workshop

A continuation of Speech 437A, this course emphasizes acting and make-up. It may be taken in lieu of Speech 105B.

#### Speech 438. Creative Dramatics

The purpose of this course is to study the principles and techniques of creative dramatics as they may be applied in the classroom, theater, and speech therapy program. Major emphasis is placed on materials for dramatization paralleling the mental, physical, and emotional levels of children in grades kindergarten through eight. Application of these techniques with high school students is also considered. The philosophy of creativity is discussed, and attention is given to the integration of the arts in the total educational picture. The course includes a workshop in which members of the class plan and carry out creative activities with children.

Credit: 2 semester-hours

#### Speech 439. Workshop in Speech Correction

This course is especially designed for students who wish to fulfill certification requirements to teach children with speech disorders or for graduate students needing to fulfill prerequisites for matriculation for the Master's degree in speech. Specialized areas in the speech sciences are offered on a workshop basis requiring attendance during all or part of the six-week summer session, depending upon the number of units elected. Special 439A, 439B, 439C must be taken in sequence. (439D may be taken with 439C).

#### Part I

#### Speech 439A. Phonetics

An intensive study is made of the manner and place of articulation of sounds heard in American English. Skill is developed in using the International Phonetic Alphabet to transcribe speech both prescriptively and descriptively, from live and recorded voices. Consideration is also given to the intonation and stress patterns of spoken English.

Credit: 2 semester-hours

#### Part II

## Speech 439B. Anatomy and Physiology of the Auditory and Vocal Mechanisms

The work of this course entails a detailed study of the larynx and ear as they function in the production and reception of speech. Consideration is also given to the physics of sound and to the structure and functioning of the nervous system.

#### Part III

#### Speech 439C. Speech Pathology

The purpose of this course is to present a comprehensive analysis of the major pathologies of articulation, voice, rhythm, and symbolization. The etiology and treatment of severe stuttering, aphasia, cerebral palsy, and the dysphonias are discussed.

Credit: 3 semester-hours

#### Parts IV, V and VI

## Speech 439D. Practicum in Speech Correction Speech 439E. Advanced Practicum in Speech Correction

Students are required to spend forty-five clock hours in the Speech and Hearing Center for each semester-hour of credit in order to gain experience in planning and carrying out programs in therapy with children who have speech and hearing problems. Written observation reports, lesson plans, and progress reports are required. Students also participate in staff conferences and meetings with parents of children enrolled for speech therapy. Practicum hours may also be arranged at local speech centers and hospital units.

Prerequisite: A course in speech correction.

Credit: 1 semester-hour each

#### Speech 439F. Voice Disorders

The purpose of the course is to study selected disorders of voice production. Consideration is given to etiology, pathology, and therapy related to vocal nodules, contact ulcers, paralysis of the vocal cords, and other organic voice problems. Speech rehabilitation techniques for the laryngectomized, and persons with cleft palate conditions are also discussed.

Prerequisite: Speech 439B and C, or consent of the instructor

Credit: 2 semester-hours

#### Speech 448. Choral Speaking

In a speaking choir, students acquire skill in interpreting literature suitable for group practice. Consideration is given to their use in the various grade levels in teaching. Students prepare a group of selections for their particular interests and purpose.

#### Speech 449. Advanced Public Speaking

This is an advanced course in the theory and practice of public speaking. It provides opportunities for further training in more complex speech skills, especially in persuasive speaking and conducting a meeting.

Prerequisite: Speech 204 or the equivalent

Credit: 2 semester-hours

#### Speech 456. Play Direction

This course covers choosing, casting, and directing plays. Scenes are directed for class criticism, and a detailed prompt-book of one play is prepared. Whenever possible, this play is given publicly before an audience. This course complements Speech 435.

Prerequisite: Speech 437B. or consent of the instructor

Credit: 2 semester-hours

#### Speech 457. Directing the Assembly Program

It is the purpose of this course to prepare students to organize and to conduct assembly programs. Class lectures and discussions cover all phases of the director's responsibilities. Groups conduct research on suitable program materials and share their findings. Each student prepares a detailed script for an assembly or commencement program, or a comprehensive set of notes and materials.

Credit: 2 semester-hours

## Speech 461A and 461B. Practicum in Speech Correction, I and II

Remedial speech laboratories are maintained at the College as a community service so that students may apply their knowledge of diagnostic, remedial, and evaluative techniques in a professional laboratory experience. Students assist staff members in demonstrations, prepare lesson plans for individual and group speech therapy, and teach under supervision.

Prerequisites: PHONETICS and Speech Correction

Credit: 2 semester-hours each

#### Speech 461C. Advanced Practicum in Speech and Hearing

This course provides further opportunities to apply techniques of speech and hearing rehabilitation under supervision in a laboratory setting. Students are required to: (1) administer audiometric tests and speech diagnostic examinations; (2) work with parents of chil-

dren who have speech disorders; and (3) assist the beginning studentspeech therapist in planning and carrying out therapy sessions.

Prerequisite: Speech 461A and B

Credit: 2 semester-hours

#### Speech 462. Group Discussion and Leadership

The purpose of this course is to study the principles of democratic discussion and the methods employed in guiding and participating in the informal group discussion, and in the panel, symposium, lecture, and debate forum. Parliamentary procedure is considered. Opportunities in the application of principles and methods studied are given through student participation in discussion programs dealing with community and national problems. Attention is also given to the ways in which group discussion may be used as an effective teaching method in the general school curriculum.

Credit: 3 semester-hours

#### Speech 463. Audio-Visual Aids in Teaching Speech

The aim of this course is to equip prospective teachers to understand the desirable characteristics; capabilities; and all possible uses of charts, models, projection equipment, and magnetic and disc recorders, available for the teaching of speech. The distribution, cost, operation, servicing, and storing of instruments and of supplies are also considered.

Credit: 2 semester-hours

#### Speech 464. Psychology of Oral Communication

This course deals with the development of speech and language in the individual, and the problems of communication that lead to confusion of meaning and misunderstanding. Consideration is given to the psychology of persons who are handicapped in speech, hearing, and/or reading, including hysterical or psychogenic impairments. The contributions of learning theory, psychoanalytic theory, and semantics to the field of communication are studied.

Credit: 2 semester-hours

#### Speech 468. Measurement of Hearing

A comprehensive study of the measurement of hearing is made in this course with attention given to the educational implications of impaired audition and deafness. A review of the physics of sound and the anatomy and physiology of the auditory mechanism is included. Emphasis is placed on principles and techniques of screening tests,

interpretation of test results, and pure-tone and speech audiometry. Demonstrations and supervised practice are provided.

Prerequisite: Speech 208 or equivalent

Credit: 3 semester-hours

#### Speech 469. Auditory Rehabilitation

The purpose of the course is to study the current theories and practices of teaching speech reading and auditory comprehension to hard-of-hearing children and adults. The educational problems of helping the student to gain proficency in speech reading as a receptive language process are discussed. Principles of auditory training are studied as a means to help develop the use of residual hearing. Emphasis is placed on the ways in which speech reading and auditory comprehension supplement each other in the rehabilitation of the hard-of-hearing individual. Practical consideration is given to the preparation of lessons for the acoustically impaired at all grade levels.

Credit: 2 semester-hours

#### Speech 470. Argumentation and Debate

A study is made in this course of the principles of argumentation including characteristics of propositions, definition of terms, logical organization, evidence, and oral argumentation techniques. Consideration is also given to the organization and coaching of school forensic programs. Practice and experience are afforded the student in argumentation and debate on current, significant issues.

Credit: 3 semester-hours

#### Speech 471. Advanced Acting

Through three areas of activity this course aims to broaden the student's appreciation of the art of acting and to increase his own acting skill. This is accomplished through individual study of established actors and schools of acting, through critiques of current acting as observed by attending professional productions, and mainly through preparation of solo and group acting exercises, both original and from established dramatic literature. As far as possible, attention is paid to the student's future personal use of the material and exercises of the course.

Prerequisite: Speech 105B. Introduction to Dramatic Production, II, or its equivalent, with a grade of "B" or better, or the permission of the instructor

#### Speech 472. Voice Science

The purposes of the course are: (1) to have the student make a careful analysis of his own vocal structure and vocal habits as applied to the basic aspects and factors of sound; (2) to analyze ineffective and effective voice, characteristics of pitch, volume, and quality and work for the elimination of unpleasant elements through intensive practice; and (3) to acquire and develop control of a pleasing speaking voice in various speaking and oral reading situations.

Prerequisite: Speech 100D

Credit: 2 semester-hours

#### SERVICE COURSES FOR NON-SPEECH MAJORS

Students in other departments of the College may take these courses for graduate credit under certain conditions. Such students are advised to check with their advisers regarding enrolling in these courses.

#### Speech 454. Training the Speaking Voice

This is a course in the study of the problems of speech, the development of a pleasant speaking voice with precision in diction, and the application of speech skills to practical speaking situations.

(Not for Speech majors)

Credit: 2 semester-hours

## Speech 466. Speech Development: Improvement and Re-education

This course is intended for superintendents, principals, and class-room teachers who have little or no background in speech education. Consideration is given to the following topics: (1) speech development; (2) speech difficulties or problems found on the kindergarten, elementary, and secondary-school levels; (3) acquisition of good voice and speech characteristics; (4) use of techniques and materials in classrooms to motivate good speech patterns; and (5) ways of setting up and integrating speech education in school systems. Demonstrations with individuals and groups are made, and students are expected to prepare a practical project.

(Not for Speech majors)

#### OTHER COURSES THAT MAY BE USED AS ELECTIVES

For more complete descriptions see the undergraduate catalog.

#### FINE ARTS COURSES

#### Fine Arts 400. Philosophy of Art

This course is designed to give the student a knowledge of the various theories of art and the nature of the art experience. Readings include the works of major philosophic writers, artists, and psychologists. Through discussion each student is encouraged to develop a personal philosophy of art education. For Fine Arts majors or by instructor's permission.

Credit: 2 semester-hours

#### Fine Arts 402. Modern Philosophies of Art

The work of the major writers in art in the Nineteenth and Twentieth Centuries is examined. Exploration is made in the nature of the creative experience, the function of art in the life of the individual and of society, the nature of the creative process, the rise of new materials, and institutions and sentiments affecting current thinking in the field. Discussions are based on readings of philosophers, poets, social scientists, psychologists, and artists.

Credit: 2 semester-hours

#### Fine Arts 415. Designing in Native Materials

In this course the student gains an appreciation and understanding of art expression growing out of the immediate environment as he works creatively with native materials. A new respect for the potentials of raw earth products is discovered through art experiences in keeping with good conservation practices. Flower and plant arrangements for room and table decorations are studied. Digging for clay, hunting for wood, seeds, grasses, and experimenting with dyes become an exciting adventure.

Credit: 2 semester-hours

#### Fine Arts 420A and 420B. Sculpture General: I and II

These courses provide Fine Arts majors studio experiences in modeling, direct carving, construction and casting. A variety of materials are explored including clay, plaster, metal, plastics, stone and wood. Further assignments require readings, reports, and visits to museums and galleries.

#### Fine Arts 425A and 425B. Metalwork General: I and II

These courses introduce Fine Arts students to the metals and techniques traditionally used in the shaping of useful articles and to the influence of both materials and construction on methods of design. The role of the designer-craftsman in a technological society, the relationships of hand and machine arts, and the influence of the handicrafts on the development of taste are explored. Research includes trips, reading and discussion.

Credit: 2 semester-hours each

## Fine Arts 440A and 440B. Home Design and Community Planning: I and II

The design of the home and the community for the full utilization of the knowledge and the resources of industry, engineering, science, and art is the content of this course. Work of leading architects and city planners is explored as it fits into the solution of the problems of interest to the student and as a reflection of our contemporary cultural patterns. Trips to sources for home furnishings, model homes, well-planned communities are included in the course activities.

Credit: 2 semester-hours each

#### Fine Arts 445. Life Drawing

This is a course in the study of the structure and proportions of the human form with emphasis on expressiveness of drawing.

Credit: 2 semester-hours

## Fine Arts 460A and 460B. Photography: A Contemporary Art Form: I and II

The content is predominantly creative, using the technical materials as a medium of expression and experimentation. The work of leading contemporary artists using photography as an art medium is studied.

Credit: 2 semester-hours each

#### Fine Arts 474. Arts and Crafts in Education

Included in this course are workshop activities in the arts and crafts of the elementary and secondary school program. Painting, drawing, modeling, pottery, weaving, paper-mache, paper sculpture, school display techniques, lettering, wood, leather, plastics, metal work, and puppetry are materials and processes which are explored.

#### Fine Arts 490. Art of the Nineteenth Century

This course explores the major art movements of the Nineteenth Century in terms of the changes of social, political, and artistic personalities. The rise of Classicism, Romanticism, and Realism; the salon at mid-century; the Impressionists and Post-Impressionists are discussed as well. The work of this period is studied through illustrated lectures, museum trips, readings, and discussion. The course is planned for both non-art and art majors.

Credit: 2 semester-hours

#### Fine Arts 491. Art of the Twentieth Century

This course surveys the major influences and trends in the development of painting, sculpture and architecture of the Twentieth Century. Activities include illustrated lectures, discussions, readings, reports, and visits to museums and galleries. The course is planned for both art majors and non-art majors as a humanities elective.

Credit: 2 semester-hours

## Fine Arts 492A and 492B. Selected Problems in Art History: I and II

Seminar courses dealing with selected art problems of historic. social, and philosophical nature. Some of the following topics are chosen for a detailed examination: the human figure in the history of art, the rise of landscape painting, Impressionism in the East and West, historical views of art criticism, the self portrait, Romanticism and Realism, art and society, the art market, the relation of the sciences, and the rise of "Isms." Methods for dealing with selected topics include lectures, readings, reports and discussion. For Fine Arts majors.

Credit: 2 semester-hours each

#### Fine Arts 493. Masterpieces of World Art

Designed for non-art majors, this introductory course studies key works of art representing prehistoric cultures, the ancient world, the East. The Renaissance and the modern period, in reference to their historical and cultural settings and the personality of the artist. The course employs illustrated lectures, museum and gallery trips, readings and discussion. It is a humanities elective.

#### Fine Arts 521. Sculpture

In this course the student is expected to explore independently one or two materials and techniques and to begin to find his own directions as a sculptor.

Credit: 2 semester-hours

#### Fine Arts 550. Silk Screen Printing

This course affords an opportunity to study and practice the graphic art techniques of silk screen from the creation of the master designs through the construction of necessary printing facilities and printing. Experiences include the use of tusche, glue, stencil lacquer, and photographic techniques.

Credit: 2 semester-hours

#### Fine Arts 551. Intaglio Printing

This course is designed to enable the graduate student to acquire additional competency and depth of experience in etching, dry point, aquatint, and soft ground. Stress is on critical evaluation of design integrated with printing technique.

Credit: 2 semester-hours

#### Fine Arts 552. Woodcut Printing

This creative workshop course explores the fine art of woodcut, and its relation to painting in color, size, and richness. The cutting of various woods and veneers is fully demonstrated. Different approaches of printing and inventiveness in using other materials in relation to wood are fully explored. The course includes lectures on prints of the past, field trips to important print exhibitions, and an exhibition of student work.

Credit: 2 semester-hours

#### Fine Arts 553. Lithography

This course is designed to provide opportunity for the student to acquire competency in the art of lithography. All steps from design and execution of master drawing to the finished print are covered. Studio experiences provide the student with first hand knowledge of tools, materials and techniques of lithographic process. Adaptation of the lithographic phase of print making to classroom use is also studied.

#### Fine Arts 561. Sculpture (Advanced)

After preliminary exploration of the problems of carving in stone and wood, each student projects his work in consultation with the instructor.

Credit: 2 semester-hours

#### GEOGRAPHY COURSES

## Geography 503. Economic Geography of the United States and Canada

A study is made of the agricultural, industrial, and commercial development of the United States and of the geographic factors that have contributed to that development.

Credit: 2 semester-hours

#### Geography 504. Economic Geography of Europe

This course constitutes a study of the economic development of the nations of Europe in relation to the environmental background and resources that have made Europe one of the world's leading continents.

Credit: 2 semester-hours

#### Geography 509. Economic Geography of Asia

This course constitutes a treatment of the economic and commercial development of the countries of Asia in relation to their natural environment.

Credit: 2 semester-hours

#### Geography 405. Urban Geography

The student is introduced to the complex forces that have been and are responsible for the intense concentration of political, social, and economic activities within a small area. This area is then analyzed from the point of view of its evolution, morphology, and function. The changing characteristics of our cities, suburbanization, city-service areas, and city-hinterland interrelationships are also investigated. Special emphasis is placed upon research methods and source materials.

Credit: 3 semester-hours

#### Geography 406. Geology

This course deals with the earth and its geographic, stratigraphic, and structural development throughout geologic time; the record of the evolution of life as interpreted through a study of rocks and fossils.

#### Geography 408A and 408B. Political Geography

This course deals with the geographic conditions influencing the significant changes in the political divisions of the world. Emphasis is placed on geographic factors influencing racial, religious, commercial, and political adjustments between nations.

Credit: 2 semester-hours each

#### Geography 409. Economic Geography of the British Isles

A comprehensive treatment of the resources of the British Isles is given, and the influence of the natural environment upon the utilization of those resources in the economic, social, and political development of the British Empire is evaluated.

Credit: 2 semester-hours

#### Geography 410. Economic Geography of Caribbean America

This is a study and interpretation of the major and important minor economic areas of Caribbean America in relation to the natural environment. Attention is also given to the historical factors which have played a part in the economic and social life of the people.

Credit: 2 semester-hours

#### Geography 411. Historical Geography of the United States

This course provides an opportunity for students of history, geography, and related disciplines to become familiar with the major principles of historical geography. It emphasizes the geographic factors pertinent to an understanding of American history. Time-place relationships ranging from pre-Columbian America to the present are surveyed and analyzed critically. Particular attention is paid to source materials, to the cartography of specific times, and to geographical lore and thought.

Credit: 3 semester-hours

#### Geography 412. Geography of Africa

This course includes a topical and regional study of Africa. Special emphasis is placed upon the problems of economic adjustment in the tropics. Soils, vegetation, climate, physiography, natural resources, and other aspects of the physical environment are examined critically in the light of man's habitation of the continent. Relations between Africa and the rest of the world are analyzed.

#### Geography 413. Economic Geography of South America

This course constitutes a study of the influence of the natural environment upon production and utilization of resources in the economic, social, and political development of the various nations of South America.

Credit: 2 semester-hours

#### Geography 414A and 414B. Advanced Economic Geography

This course is a study of the influence of the physical environment upon the production of, the trade in, and the utilization of the important agricultural, forest, mineral and sea products, and the manufactured commodities of the world.

Credit: 2 semester-hours each

#### Geography 416. Conservation of Natural Resources

This course provides an opportunity for students of the social and physical sciences to study the natural resources of the United States. Exploitation and conservation are both stressed. Our major resources are reviewed in terms of use, needs, and future developments. Consideration is given to the growth of legal and social awareness of the need for conservation practices in America.

Credit: 3 semester-hours

#### Geography 418. Regional Geography of North America

This course constitutes a detailed regional treatment of the continent of North America. Emphasis is placed upon the human activities of the various regions in relation to their natural environment and the relations of the regions to each other. Attention is given to the techniques of presenting the material and the use of geographic tools in the treatment of the subject-matter.

Credit: 2 semester-hours

#### Geography 419. Geography of the Soviet Union

This course is designed as a regional analysis of the Soviet Union. It examines critically the physical and human aspects of Soviet geography. Particular emphasis is placed on economic regions. Relations between the European states and the Soviet Union are discussed, and Russia's place in the world economy is analyzed.

Credit: 3 semester-hours

#### Geography 420. Field Geography and Conservation

This course constitutes a study of the relation between relief features of northern New Jersey, the location of natural resources, and

the way in which land use and population distribution follow these patterns. Emphasis is given to the reading and interpretation of topographical maps and aerial photographs and to a study of the United States Geological and Soil Surveys of this region. By means of an actual land-use survey the student comes to appreciate the problems of conservation as they grow out of man's use of natural resources.

Credit: 2 semester-hours

#### Geography 421. Population Problems of the World

An intensive examination of the factors which influence the present-day distributional pattern of the world's people and the political, economic, and social consequences of this development are considered. Particular attention is placed on man-land relationships as related to population problems of contemporary nations.

Credit: 3 semester-hours

#### Geography 422. Geography of the American Indian

This course is designed to survey the culture of the American Indian (from the Ice Age to the Reservation) in relation to his geographic environment. It affords an insight into the geography and cultural history of North America prior to the coming of the white man, deals with the problems experienced and created by alien cultures when they meet for the first time, and culminates with discussion of the Indian problems of the present day. It serves to introduce the student to methods employed in interdisciplinary attacks upon cultural problems. The views of the geologist, archaeologist, cultural anthropologist, cultural historian, as well as the geographer are critically examined.

Credit: 3 semester-hours

#### Geography 423. The Geography of Transportation

An intensive examination of the principles of transportation geography is provided. The different methods of transportation are studied systematically with regard to their development and present-day role in regional development. The growth of international specialization and the resulting economic development are also considered.

Credit: 3 semester-hours

#### Geography 424. Geography of New Jersey

This course is a detailed topical and regional study of New Jersey. Physiography, climate, soils, flora, fauna, agriculture, industry, trade, population, and relations with neighboring states are intensively studied. On the basis of the data thus examined an attempt is made to

delineate the geographic regions of the state. Emphasis is placed throughout on the relationship between New Jersey's people and New Jersey's earth.

Credit: 3 semester-hours

#### Geography 425. Geography of Exploration and Settlement

This course is designed to survey the great age of exploration and settlement (1500-1900) of lands overseas inaugurated by the Columbian voyages. Its major themes are: knowledge concerning the lands of the earth, the unfolding of the world map, the type settlements erected by Europeans in distant lands. Special attention is given to motives for exploration, methods of navigation and travel, routes explored, and the cultural features marking European settlement.

Credit: 3 semester-hours

#### MUSIC COURSES

#### Music 406. Epochs in Musical Development, Part III

This course is planned to acquaint the student with contemporary music and is a continuation of Music 208. It includes a study of the music of Debussy, Stravinsky, Schoenberg, Berg, Bartok, Hindemith, etc. Students are expected to compose short pieces in contemporary idioms.

Prerequisite: A college course in music history or its equivalent satisfactory to the instructor

Credit: 2 semester-hours

#### Music 407. Development of the Opera

This course deals with origin, development, and characteristics of opera in the Italian, French, German, and Russian schools. Class analyses are made of representative operas of these schools.

Credit: 2 semester-hours

#### Music 408. Wagner Music Dramas

This course deals with the operas and music dramas of Richard Wagner. It includes a study of Wagner's artistic ideals and their application to his compositions. Special attention is given to those works which have their sources in great literature, as the Ring of Nibelung, Parsifal, and Tristan and Isolde.

#### Music 413. Masters of the Symphony

This course helps to provide the student with an understanding and appreciation of the classic and romantic symphony through the study of the symphonies of Haydn, Mozart, Beethoven, Schubert, Schumann, Tschaikovsky, and Brahms. Class analyses, including the reading of scores, are made of representative symphonies.

Credit: 2 semester-hours

#### Music 425. Music of the Romantic Period

This course deals with the romantic spirit in music as expressed in the works of Schubert, Schumann, Mendelssohn, Chopin, Berlioz, Liszt, and others. It includes a study of program music, piano and song literature, and the rise of national schools of musical composition. Representative works are studied through performance recordings, and radio listening.

Credit: 2 semester-hours

#### Music 499A. Problems in the Teaching of School Music

This is a post-student teaching course. It aims to (1) evaluate student-teaching experiences; (2) give an opportunity to the student to share with his classmates the problems encountered in student teaching and seek a possible solution for the same; (3) meet shortages in teacher preparation not provided for in previous courses; (4) give the student a unified view of school-music education before he enters the teaching field. The content of this course is determined largely by the expressed needs of the students.

Credit: 2 semester-hours

#### Music 499B. Workshop in School Music

This course is designed primarily for music teachers-in-service who wish to work out projects for use in their respective schools. The content of this course is determined by the needs in the field. It may include folk-song dramatizations, small vocal and instrumental ensembles, the integration of music with other subjects in the curriculum, music for boys, visual aids in music pageants, festivals, and materials for special programs. This course provides the teacher with a number of units of work suitable for classroom use.

#### HEALTH AND PHYSICAL EDUCATION COURSES

#### Health Education 407. Prevention and Care of Athletic Injuries

This is a lecture and laboratory course designed to acquaint the student with ways to prevent and care for the common injuries sustained in athletics. Attention is given to sprains, strains, bruises, burns and fractures. The responsibility of the coach is emphasized in caring for injuries. This course is a recommended elective for men physical education majors.

Prerequisite: HEALTH EDUCATION M101

Credit: 2 semester-hours

#### Health Education 408. Driver Education

#### Part I

This part consists of a minimum of 40 hours of class recitations and discussions for which home reading and study have been assigned. The following topics are included: (1) history and development of driver education and training programs; (2) objectives of driver education; (3) local, state, and national traffic safety programs; (4) driver qualifications; (5) psycho-physical testing; (6) curriculum content of courses in driver education and training; (7) construction, operation, and maintenance of automobiles; (8) traffic laws and driver licensing; (9) traffic engineering; (10) pedestrian education and protection; (11) equipment for teaching driver education; (12) liability, costs, and insurance; (13) driver education as a part of the program of the high school; (14) public relations; (15) records and reports; and (16) visual aids in teaching driver education.

#### Part II

This part consists of a minimum of 20 hours devoted to the following: (1) behind-the-wheel instruction; (2) demonstrations and student-teacher practice in the car; and (3) road tests in traffic. Home reading and study are required in preparation for these projects.

Prerequisite: Driver's license with three years of driving experience with satisfactory driving record

Credit: 3 semester-hours

#### Health Education 411. School Health Services

The student is familiarized with the health services in the school. The part the teacher plays in coordinating activities with the medical staff is emphasized.

Prerequisite: HEALTH EDUCATION 100

## Physical Education 404. Tests and Measurements in Physical Education

This course is designed to acquaint students majoring in physical education with the history of measurement and evaluation in this field and to understand current trends and practices. Various tests in general qualities and traits relating to motor performance and tests relating to sports skills are presented to and administered by the students. Test evaluation and construction of written test questions are discussed. Methods of treating statistical data relating to physical education are presented.

Credit: 2 semester-hours

## Physical Education 409. Organization and Administration of Physical Education

The details of organizing the various aspects of the physical education program are discussed. Legislation, financing, excuses, plant facilities, care and purchase of supplies and equipment, office management and records, intramural programming and tournaments, and conduct of the varsity sports program are among the topics considered. This course may not be taken until all junior-level work has been completed.

Credit: 2 semester-hours

#### Physical Education 410. Water Safety and First Aid

This course includes intensive instruction in swimming, diving, water sports, boating, canoeing, water safety, and first aid. Students can qualify for Red Cross certificates during this course.

Credit: 2 semester-hours

## Physical Education 411. Organization and Administration of Athletics

The purpose of the course is to offer practical suggestions and aids for the managing of affairs of an athletic program to those who expect to become teachers, supervisors, and directors of physical education.

The items discussed include athletic eligibility, management, equipment, awards, finances, budgets, safety, maintenance, planning of facilities, junior and senior high school athletics, and current athletic trends.

## Physical Education 412. Organization and Administration of Recreation

This course is designed to develop an understanding of the philosophy, scope and values of recreation in our contemporary life. Program planning, suitable activities for various age levels, and publicity and promotion are discussed.

Credit: 2 semester-hours

#### Physical Education 413. Social Recreation

This course is designed to give the student materials and techniques for handling small and large groups of people in a social situation. The needs of children, teen-agers, young adults, and senior citizens are considered. Materials in ice-breakers and mixers, seasonal events, active and quiet parties, skits, and dances are presented. Correct social conduct is covered and high standards of deportment set for the various activities.

Credit: 2 semester-hours

#### Physical Education 414. Nature and Function of Play

The psychological and sociological implications of play are studied and related to the growth and development of children and young people. The effect of play on society through the ages, as well as the attitudes of society toward play, are studied to evaluate play in relation to juvenile delinquency, worthy use of leisure time, and other social and psychological problems.

Prerequisite: Education 201

Credit: 2 semester-hours

## Physical Education 415. Movement Techniques and Rhythmic Accompaniment

This course is designed to develop skill and understanding of body movement techniques and the rhythmic accompaniment of such techniques. Lectures, reading assignments, demonstrations, and participation will be utilized to relate anatomical structure and function to these movement techniques and to develop teaching skill.

## Physical Education 450. Curriculum Development in Physical Education

This is a study of the selection of appropriate physical education activities for elementary and high school programs based on principles of growth and development and psychological and sociological needs. Current trends and practices are investigated and evaluated. Opportunities are made available for working in the student's particular area of interest, and to identify the relationships of physical education programs at all levels, and of physical education to other areas of instruction in the school curriculum.

#### THE NEW JERSEY STATE SCHOOL OF CONSERVATION

The six State Colleges, the State Department of Education, and the State Department of Conservation and Economic Development jointly operate the New Jersey State School of Conservation at Lake Wapalanne in Stokes State Forest, Sussex County. Credit for the courses given at the New Jersey State School of Conservation may be applied toward the Master's degree at the New Jersey State Colleges, subject to approval in advance by the institution concerned. Students are advised to check with their advisers relative to the application of these credits towards graduate degrees.

The following courses may be offered at the New Jersey State School of Conservation. For complete descriptions, please refer to the departmental write-ups appearing in this bulletin. Special descriptive announcements may also be had by writing to the New Jersey State School of Conservation, Branchville, New Jersev.

#### FINE ARTS DEPARTMENT

Fine Arts 415. Designing in Native Materials Fine Arts 474A. Arts and Crafts in Education

#### GEOGRAPHY DEPARTMENT

Geography 420. Field Geography and Conservation

#### INDUSTRIAL ARTS DEPARTMENT

Industrial Arts 442. Conservation of Basic Industrial Materials Industrial Arts 443. The Use of Basic Industrial Materials in Industry

#### EDUCATION DEPARTMENT

Education 440. Camping Education

Education 441. Conservation Education

Education 442. Practicum in Camp Leadership

Education 444. Practicum in Conservation Education

Education 480. Field Science for Elementary Teachers

#### HEALTH AND PHYSICAL EDUCATION DEPARTMENT

Physical Education 410. Water Safety and First Aid

#### SCIENCE DEPARTMENT

Science 405. Field and Laboratory Studies in Science

Science 411. Problems in Field Studies in Science Science 412. Field Studies in Science: Biological

Science 413. Field Studies in Science: Physical

Science 414. Conservation of Plants and Animals

Science 415. Conservation of Soil and Water

Science 419. Field Science and Conservation

Science 420. Water Supply and Conservation Problems

#### SOCIAL STUDIES DEPARTMENT

Social Studies 477. Rural Sociology

Social Studies 482. Conservation and Rural Economic Life Social Studies 494. Social Studies and Conservation

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GRADUATE DIVISION
MONTCLAIR STATE COLLEGE
Upper Montclair, N. J.

Upper Montclair, N. J. Permit No. 102

Return Requested



# MONTCLAIR STATE COLLEGE

GRADUATE BULLETIN
1964-1966

UPPER MONTCLAIR, NEW JERSEY



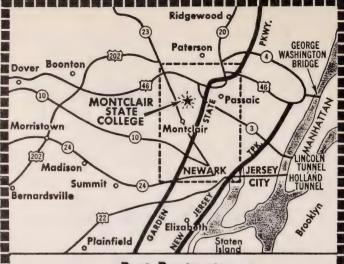
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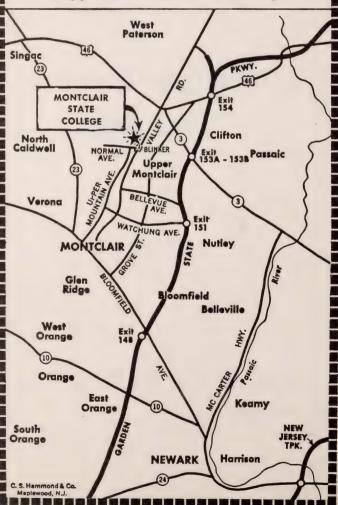
## MONTCLAIR STATE COLLEGE

Graduate Division 1964-1966

MONTCLAIR STATE COLLEGE



# Best Routes to MONTCLAIR STATE COLLEGE Upper Montclair, New Jersey



#### HOW TO GET TO MONTCLAIR STATE COLLEGE

#### Location

Montclair State College is on Valley Road and Normal Avenue, Upper Montclair (turn at the blinker). The College is one mile south of the junction of Routes 3 and 46 on Valley Road.

#### Directions for Reaching the College

From Bloomfield Avenue, Montclair Center (Sears' store) proceed north on Valley Road—three miles to the Normal Avenue blinker.

From Route 46 East, the landmark is West's Diner; take the next right, Valley Road—one mile to blinker at Normal Avenue.

From Route 46 West, the landmark is the junction with Route 3. Turn on Valley Road to Montclair, bear right on cloverleaf and proceed south under Route 46—one mile to blinker at Normal Avenue.

From the Turnpike North of Exit 10 or South from George Washington Bridge turn at Route 3 West or Route 46 West, then as above. From the Turnpike South of Exit 10, leave the Turnpike at Exit 10 and follow directions for Garden State Parkway North.

From Garden State Parkway North turn left at Exit 153B and proceed West on Route 3 to Valley Road.

From Garden State Parkway South turn at Route 46 West (Clifton Exit 154) thence to Valley Road. If you miss that turn, continue South to Exit 151, Watchung Avenue, thence West to Valley Road and North to blinker at Normal Avenue.

The #60 Public Service Bus from Newark to Montclair terminates at the South end of the campus.

The #76 Public Service Bus from Paterson to Orange stops at Valley Road and Normal Avenue.

The #66 DeCamp Bus from New York, which leaves on the half hour from Platform 73, Port Authority Bus Terminal, stops at Valley Road and Mt. Hebron Road—one long block from the campus.

The Erie Railroad, Montclair Heights Station, is at the Southwest corner of the campus.

General Policies and Program Dr. Thomas H. Richardson Acting President
Instructional Program and Policies Dr. Allan Morehead Dean of the College
Student Personnel Services, Scholarships and Loans, Dormitories  Mr. Lawton W. Blanton, Dean of Students
Admission to Undergraduate Division Mr. George G. King Director of Admissions
Business and Financial Matters Mr. Vincent B. Calabrese Business Manager
College High School Dr. Frank M. Cordasco
Student Teaching and Placement Dr. Norman E. Lange Director of Student Teaching and Placement
Certification and Evaluation, Teacher Certificates Miss Simone Picard Counselor and Certification Advisor, Part-Time and Extension
Admission to Graduate Program Dr. Edward J. Ambry Chairman of Graduate Studies
Part-Time and Extension and Summer Session Mr. Robert MacVane Director of Evening Division
Transcripts and Records Mr. Peter P. Stapay, Registrar
Alumni Affairs
Public Information Mr. Morris G. McGee  Coordinator of Public Relations
Film Rentals Audio-Visual Department
Intercollegiate Athletics (Men) Mr. Henry E. Schmidt, Director
Intercollegiate Athletics (Women) Dr. Hazel Wacker, Coordinator

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# MONTCLAIR STATE COLLEGE

#### **CALENDAR 1965-1966**

#### EVENING DIVISION

#### Graduate Studies

September 11, 13, 14 Registration—Fall Semester

September 16 Evening and Graduate Classes Begin
October 5 Fall Convocation and Commencement

November 11, 12, 13 Faculty Institute, No Classes

November 15 Last day to file for June, 1966 M.A. Degree conferment

November 24-28 Thanksgiving Recess

December 19, 1965 to January 2, 1966

January 22 Evening and Graduate Classes End

Christmas Recess

January 29, 31 Registration-Spring Semester

February 1

February 5 Evening and Graduate Classes Begin

March 15 Last day to file for September, 1966 M.A. Degree conferment.

March 23 M.A. Comprehensive Examinations
March 26 M.A. Comprehensive Examinations

April 2-10 Spring Recess

May 28 Evening and Graduate Classes End

June 5 Baccalaureate and Convocation

June 8 Commencement

# STATE OFFICIALS

# State Board of Education

GEORGE F. SMITH, President	Metuchen
JOHN F. LYNCH, Vice President	Morristown
Mrs. Hugh Auchincloss	Ridgewood
Harvey Dembe	Bayonne
Martin Fox	Millburn
James W. Parker, Sr.	Red Bank
Joseph L. Richmond	Woodstown
HARRY M. SEALS	
Jack Slater	
WILLIAM A. SUTHERLAND	Liberty Corner
Dr. Deborah Cannon Wolfe	Cranford

# Commissioner of Education

Dr. Frederick M. Raubinger

# Assistant Commissioner for Higher Education

DR. EARL E. MOSIER

#### Director of Teacher Education and Certification

Dr. Allan F. Rosebrock

# ADMINISTRATIVE OFFICERS

TI II D'I I FID	And Durides
· ·	Acting President
	Dean of the College
•	Dean of Students
·	Business Manager
	Assistant to the President
	Assistant Dean of the College
3 7 7	Chairman, Graduate Studies
	Director, College High School
	Director, Evening Division
· · · · · · · · · · · · · · · · · · ·	Recorder, Evening Division
	Director, Admissions
	Director, Student Teaching and Placement
*	Coordinator of Research
	Counselor, Evening Division
	Head Librarian
Harold C. Bohn, Ed.D.	Chairman, Department of English
Lillian C. Calcia, Ed.D.	Chairman, Department of Fine Arts
Paul C. Clifford, A.M.	Chairman, Department of Mathematics
L. Howard Fox, Ph.D.	Chairman, Department of Speech
Carl E. Frankson, Ph.D.	Chairman, Department of Industrial Arts
M. Herbert Freeman, Ph.D.	Chairman, Department of Business Education
Irving Gawley, Ed.D.	Chairman, Department of Science
	Chairman, Department of Home Economics
	Chairman, Department of Social Studies
* 1	Chairman, Department of Foreign Language
	Chairman, Department of Health and
, , , , , , , , , , , , , , , , , , ,	Physical Education
Ralph Walter, Ed.D.	Chairman, Department of Education
	Chairman, Department of Music
weight with the state of the st	Chairman, Deparement of Music

# GRADUATE COUNCIL

Edward J. Ambry, Chairman	Carl E. Frankson	Louis Roederer
Joseph F. Becker	Louis C. Nanassy	Alex H. Zimmerman
Harold C. Bohn	Earl K. Peckham	Robert E. McVane, ex offico
Lillian A. Calcia	Anthony J. Pettofrezzo	Allan Morehead, ex offico
Earl C. Davis	Bertha B. Quintana	Thomas H. Richardson, ex offico
L. Howard Fox	John G. Redd	

# LIBRARY AND AUXILIARY SERVICES

William L. Williamson, Ph.D.	Head	Librarian
Ruth Beach, B.L.S.	Reference	Librarian
Elsie O. Gibson, M.L.S.	Acquisitions	Librarian
Gertrude T. Greenberg, M.L.S.	Serials	Librarian
Blanche W. Haller, B.S. in L.S.		
Selma S. Harris, M.L.S.	Reference	Librarian
Mary Hellman, M.L.S.	Reference	Librarian
Jeanette T. Poore, B.S. in L.S.		
Marian Siegeltuch, M.L.S.	Reference	Librarian
Dorothy Walter, M.S. Librarian,	College Hi	gh School
Emma Fantone, A.M. Au	udio-Visual	Education
Thaddeus J. Sheft, A.M. Au	adio-Visual	Education

# GRADUATE FACULTY

***	No. 1 Decidence of Education
Thomas H. Richardson, Id.D.	Acting President and Professor of Education President (on leave) and Professor of Education
E. DeAlton Partridge, Ph.D	Dean of the College and Professor of Education
Allan Morehead, Ed.D.	Chairman of Graduate Studies and
Edward J. Ambry, Ph.D	Professor of Education
Hart Aller In EdD	Professor of Physics and Science Education
Hugh Allen, Jr., Ed.D.	Associate Professor of English
John A. Almquist, M.A.	Assistant Professor of Spanish
Esperenza F. Amarai, Fh.D.	Associate Professor of Speech
Dishard I Panhan Dh D	Associate Professor Social Studies
Learn E Paghan Ed I)	Associate Professor of Chemistry
Pobost P. Becker, Ed.D.	Associate Professor of Social Studies
Laurence Rollegembe Ed D	Associate Professor of Education
Carolyn F. Book Ph D	Professor of Latin
Harold C. Bohn Ed D	Professor of English
Daniel Brower Ph D	Associate Professor of Psychology
Leonard I Buchner Ph D	Associate Professor of Psychology
Edger C Byo A M	Associate Professor of Social Studies
	Professof Fine Arts
	Associate Professor of Music
Paul C Clifford A M	Professor of Mathematics
Alden C Coder Ed D	Associate Professor of Health and Physical Education
	Associate Professor of Education
	Associate Professor of Zoology
	Professor of Psychology and Guidance
	Associate Professor Health and Physical Education
	Associate Professor of Health and Physical Education
	Professor of Industrial Arts
	Professor of English
	Associate Professor Health and Physical Education
	Associate Professor of Education
	Professor of Social Studies
	Associate Professor of Psychology
L. Howard Fox, Ph.D.	Professor of Speech
Carl E. Frankson, Ph.D.	Professor of Industrial Arts
	Professor of Business Education
	Professor of Business Education
	Associate Professor of Education
	Associate Professor of Psychology
	Professor of Science
	Professor of Psychology
Alfred H. Gorman, Ed.D	
Howard L. Haas, Ed.D	Professor of Business Education
Katharine B. Hall, Ph.D.	Professor of Home Economics
Herbert J. Hauer, Ph.D.	
	Professor of Education
Gilbert O. Hourtoule, Ph.D.	
Daniel Jacobson, Ph.D.	Associate Professor of Geography
Abraham Kampf, Ph.D.	Professor of Fine Arts
Ellen Kauffman, A.M.	Associate Professor of Education
Lawrence B. Kenyon, Ed.D.	Associate Professor of Education
Helene Klibbe, Ph.D.	Assistant Professor of French
Walter E. Kops, A.M.	

# **GRADUATE FACULTY (Continued)**

Stephen W. Kowalski, Ph.D.	Associate Professor of Science
Russell Krauss, Ph.D.	Professor of English
	Professor of Social Studies
	Professor of Biology
·	Assistant Professor of English
0 ,	Associate Professor of Speech
Charlotte R. Lockwood, M.A.	
Orpha, M. L. Lutz, Ph.D.	Professor of Psychology
	Associate Professor of Mathematics
Samson McDowell, Ph.D.	Professor of Biology
Clyde W. McElroy, Ed.D.	Associate Professor of Speech
James T. Mehorter, Ed.D.	Associate Professor of Psychology
Frank P. Merlo, Ed.D.	Associate Professor of Education
Ben Minor, M.E.E.	Associate Professor of Physics
Maurice P. Moffatt, Ph.D.	Professor of Social Studies
	Professor of Music
	Assistant Professor of Social Studies
	Associate Professor of Music
	Assistant Professor of Biology
	Professor of Business Education
	Health and Physical Education
	Professor of Education
	Professor of English
	Associate Professor of Mathematics
	Associate Professor of Mathematics  Associate Professor of Science
	Assistant Professor of Spanish
	Associate Professor of Social Studies
	Associate Professor of Health & Physical Ed.
	Assistant Professor of Education
	Assistant Professor of Spanish and French
	Associate Professor of English
Louis M. J. Roederer, M.A.	Associate Professor of French
	Assistant Professor of Social Studies
	Associate Professor of Education
	Associate Professor of Education
-	Assistant Professor of Music
	Professor of Speech
	Associate Professor of Psychology
Horace J. Sheppard, A.M.	Associate Professor of Business Education
	Professor of Mathematics
Henry J. Sredl, Ph.D.	Assistant Professor of Industrial Arts
Enid M. Standring, Ph.D.	Assistant Professor of French and German
Lillian Szklarczyk, Ph.D.	Assistant Professor of French
	Professor of Health and Physical Education
Elizabeth T. Vanderveer, Ed.D.	Professor of Business Education
	Associate Professor of Fine Arts
	Professor of Health and Physical Education
	Professor of Education
*	
	Associate Professor of Fine Arts
	Professor of English
	Associate Professor of Music
	Professor of Music
,	

# **EMERITUS FACULTY**

Harry A. Sprague, Ph.D.	President Emeritus
Clyde M. Huber, Ph.D.	Dean Emeritus
Lawrence H. Conrad, A.M.	Professor Emeritus of English
David R. Davis, Ph.D.	Professor Emeritus of Mathematics
Edwin S. Fulcomer, Ed.D.	Professor Emeritus of English
Elwyn C. Gage, Ph.D.	Professor Emeritus of Social Studies
Charles E. Hadley, Ph.D.	Professor Emeritus of Biology
Edna E. McEachern, Ph.D.	
Harley P. Milstead, Ph.D.	Professor Emeritus of Geography
Rufus D. Reed, Ph.D.	Professor Emeritus of Chemistry
John J. Rellahan, Ph.D.	Professor Emeritus of Economics
Kenneth O. Smith, Ph.D.	Professor Emeritus of Physics
W. Scott Smith, Ph.D.	Professor Emeritus of Education

## History and Development of the Graduate Division

In 1908 Montclair State College began its teacher-education program as a two-year normal school. In 1927, by action of the State Board of Education, it was changed to a State Teachers College with four-year curricula leading to a Bachelor of Arts degree and certification to teach in the secondary schools of the State. Extension courses were instituted in 1929, and summer sessions in 1930, to enable teachers who held only a diploma and a teacher's certificate to obtain a Bachelor's degree.

On July 1, 1958, by action of the State Board of Education, the name of the College was changed to Montclair State College. Its function, however, continues to be that of a professional school devoted primarily to serving the interests of secondary education in this State.

The State Board of Education authorized, in June, 1932, the establishment of appropriate graduate programs leading to the Master of Arts degree, which the College was empowered to grant. Graduate studies were first offered in the summer of 1932 and have been continued in all regular and summer sessions since that time.

In 1937, the Middle States Association reviewed and accredited the graduate program and has since done so regularly, as has the American Association of Colleges for Teacher Education, whose function has been assumed by the National Council for the Accreditation of Teacher Education. In 1948, the Graduate Committee was formed as a sub-committee of the Administrative Council to co-ordinate the graduate work of the various departments participating in it and to establish policies and standards appropriate to Master's degree programs. Since 1956, this Committee, under the title of Graduate Council, has assumed greater responsibility for the conduct of graduate work.

The last decade has witnessed a rapid but orderly expansion of the entire College. The construction of additional modern physical facilities, the development of a graduate faculty as an identifiable entity, and the establishment of new and appropriate degree programs, have kept pace with both the increasing graduate student enrollment and the educational needs of New Jersey.

Currently there are more than 2,000 students registered in the various courses of this division, with approximately 1,000 students matriculated in seventeen different programs leading to the Master of Arts degree.

# Professional and Academic Status of the College

# Accreditation and Memberships

Montclair State College is a fully accredited member of the Middle States Association of Colleges and Secondary Schools. In addition, the National Council for the Accreditation of Teacher Education has granted it full accreditation for the preparation of elementary and secondary school teachers, and school service personnel, with the Master's degree as the highest degree approved. Credits are exchangeable among colleges and universities which are members of regional and national associations to the extent to which the degree requirements of individual institutions permit the acceptance of transfer credit.

The College holds memberships in the American Association of Colleges for Teacher Education, the American Council on Education, The Association of State Colleges and Universities, and the New Jersey Association of Colleges and Universities. Graduates of the College are accepted for membership in the American Association of University Women.

#### The Graduate Point of View

The objective in each of the Master degree curricula is to develop a greater degree of professional competence in the basic subject matter of the area of specialization, knowledge of the current literature relating to it, and ability to use and interpret the results of the reported investigations of others.

The various degree programs provide the background and tools needed for study in a given area. Through the basic research courses and other tasks, the student finds opportunities for personal and professional growth. There is also in each program a chance for the student to enrich his general education and basic professional background through appropriate elective experiences.

## The College Library

The Harry A. Sprague Library was opened in the Fall of 1963. It is completely air conditioned. It has three floors, and is planned to accommodate 800 students and an eventual collection of 200,000 volumes. Two classrooms are located outside the main area of the library but are an integral part of the building. Faculty carrels, individual study desks, typing areas, and conference rooms are also provided.

Special collections include the China Institute Library, the Lincoln Collection, the Cosla Collection, the Alumni Memorial Library, the Webster Collection, the Finley Collection and the College Archives.

### Master's Degree Specialization Areas

In addition to the major in Teaching, graduate work is offered in the following major areas: Administration and Supervision, Business Education, Distributive Education, English. Fine Arts, Foreign Languages (French and Spanish), Health Education, Industrial Arts, Mathematics, Music, Personnel and Guidance, Physical Education, Science, Social Studies, Speech Arts, and Speech Therapy.

# The Administration of the Master's Degree Programs

In the organization of the College, the administration unit which is responsible for the proper functioning of Master's degree curricula is the Graduate Council. Its membership consists of those administrative officials of the College who are ex-official closely associated with graduate studies, together with others who represent the various departments offering Master's degree programs. Departmental representatives on the Council are appointed by the President of the College, upon the recommendation of the department.

The Council's chief function is to develop the basic standards, policies, and procedures which govern the granting of Master's degrees, to approve new programs, and to engage in a continuous evaluation of all Master's degree work.

Graduate program policies and procedures are administered by the Chairman of Graduate Studies in cooperation with the various Master's degree program advisors and the Dean of the College, who supervises the activities of the Graduate Division and is responsible to the President of the College. All programs, policies and procedures are subject to approval by the State Board of Education.

# **Graduate Faculty**

Faculty members serving the Graduate Division are with few exceptions members of the full-time staff of the College. Those who have attained the rank of associate professor or higher, or have an earned doctorate, are eligible for appointment to

#### GENERAL INFORMATION

the graduate faculty. In addition to those with such evidence of scholarship, a limited number of experienced teachers who have demonstrated excellence in classroom instruction are assigned to teach graduate classes. While the graduate faculty is an identifiable entity, its members are not restricted to advanced instruction. Graduate courses taught constitute only a part of the regular schedule of those participating in this program.

#### **Graduate Students**

Montclair State College is a professional school devoted primarily to the interests of secondary education. The major goal of all its courses is the development of the competence of the teacher as a professional person.

The courses are organized to serve the interests of three specific groups of students:

- Group I Those who wish to matriculate for the degree of Master of Arts: teachersin-service, as well as those interested in personal and professional growth
  who hold a Bachelor's degree from an accredited college or university,
  have a high scholastic average, and are fully certified New Jersey
  teachers ,except students majoring in teaching);
- Group II Those who do not wish to matriculate for the degree of Master of Arts:

  students who hold graduate degrees and wish to continue their professional
  preparation; college graduates who wish to take courses leading toward
  secondary school certification; students who are matriculated for advanced
  degrees in other colleges and who plan to transfer their credits; and
  special students taking courses for cultural purposes without reference
  to credit:
- Group III Senior-Graduate students (Montclair State College seniors only) currently enrolled in the College who have good academic records (2.75 or better) and who are within sixteen semester hours of graduation may be permitted to take a maximum of eight semester hours of graduate work concurrently with any remaining semester hours to meet the requirements of the bachelor's degree and prior to graduation. Applicants should obtain the appropriate application form from the Graduate Office. These applications are then presented to the Registrar, the chairman of the department concerned, the Dean of the College, and the Chairman of Graduate Studies. Students should then register for this special work in the office of the Director of Field Services. This does not constitute application for the Master's degree. No graduate credit will be given retroactively for work taken in excess of the Bachelor's degree requirements and which appear on our undergraduate transcript.

#### Certification Students

Students holding Bachelor's degrees from other colleges who plan to take courses leading to certification for secondary school teaching should:

- Follow the procedure outlined under the section SPECIAL PROGRAMS WITH A MAJOR IN TEACHING.
- 2. Direct questions regarding certification to the Certification Advisor at the College; pre-registration advisement, by appointment, is recommended.
- 3. Consult Evening Division and Summer Session announcements for further information.

# Certification Students and the Master's Degree (all majors except Teaching)

Students holding Bachelor's degrees from other colleges must be fully certified to teach in the area of their major specialization by the time the Master's degree is conferred. Students should have completed their supervised student teaching or have had one year of successful teaching experience under provisional certification before they can matriculate for the Master's degree.

Those who lack some of the required preparation for limited secondary certification, or certification in either professional or special subjects for both elementary and secondary schools, may need to register for certain undergraduate courses in the 200 and 300 series, which courses will not carry graduate credit. However, if the required professional certification courses are taken in logical sequence, some of them in the 400 series, or above, may be counted toward the limited certificate as well as toward the Master's degree. Students who are interested in correlating their work for certification with some work toward the Master's degree should arrange an advisement interview with the College Certification Advisor to determine whether certain courses available might serve these combined purposes.

### Certification Students and Student Teaching

Graduates of other colleges who wish to do their student teaching through Montclair State College should obtain a statement from the Director of Student Teaching and Placement outlining the conditions under which it can be done. This group will be expected to meet the standards established for Montclair State College students before being assigned for student teaching.

Students who desire to meet the State requirement in supervised student teaching must be approved by the Director of Student Teaching, after which approval they will register for this course in the office of the Director of Field Services.

#### SPECIAL PROGRAMS WITH A MAJOR IN TEACHING

These Certificate and Master's degree programs are designed especially for college graduates who wish to prepare to become secondary school teachers, or teachers of subjects such as art and music in the elementary and secondary grades. The content, organization, materials, and methods of these courses are designed with the consideration of the student's maturity, academic background, and experience. At present, this M.A. program is open only to students with a science or mathematics background.

### ADMISSION TO CERTIFICATE\* OR DEGREE PROGRAMS

Admission is restricted to those selected graduates of accredited colleges who indicate high potential for teaching, and to in-service teachers with emergency or provisional certificates.

College graduates not employed as teachers will be screened for admission with due consideration to:

- a. Suitability or character and personality for teaching
- b. Health examination
- c. Speech and writing competence
- d. Competence in teaching field, based upon undergraduate grades of B- or better (2.75 on a 4 point scale). Students who present lower grade point averages must also present scores earned on the Graduate Record Examination Aptitude Test.

#### GENERAL INFORMATION

In-service teachers holding emergency or provisional certificates, employed by local school districts, will be admitted to the program upon application, and agreement by the employing superintendent of schools to enter into a cooperative program of supervision of the student in connection with course Education 595E, 595F Supervised Teaching Seminar. During the first semester these students will complete the application procedure regarding character, health, speech, and writing, and preparation in subject-matter field. When the student completes six to ten semester hours work at Montclair, a decision will be made regarding matriculation for the M.A. degree. If as a result of failure to satisfy the screening criteria or unsatisfactory performance in the program it is considered necessary to withdraw a student, conferences will be arranged with the student and the employing superintendent as early as possible.

\*Student who successful complete the Certificate Program will be recommended for appropriate New Jersey teacher certificates.

# REQUIREMENTS: MASTER OF ARTS WITH A MAJOR IN TEACHING SECONDARY (7-12) AND SPECIAL FIELD (K-12)

#### (1) Basic Background Requirements

Prior to completion of the program the student must have, at either the graduate or undergraduate level, a minimum of thirty semester-hour credits in general background courses distributed in at least three of the following fields: English, Social Studies, Science, Fine Arts, Mathematics, and Foreign Languages. Six semester hours credits in English and six semester hours credits in social studies will be required.

#### (2) Subject-Matter Specialization Requirements

Prior to the completion of the program the student must have, at either the graduate or undergraduate level, subject-matter background suitable in extent and coverage to constitute a teaching major in at least one field. Students whose subject-matter background is deficient will be required to remove the deficiencies prior to recommendation by the college for a teacher's certificate or a master's degree. Additional work that is needed may be taken at either the graduate or undergraduate level. Write to the Graduate Division for details.

#### (3) Professional Requirements

Prior to completion of the Certificate and/or Master's degree programs, the student must have completed a professional curriculum. Courses may be waived that have been completed (or their equivalents) at either the graduate or undergraduate level, prior to enrollment in the program. However, no student will be recommended for a certificate or a Master's degree who has not completed Student Teaching or the Supervised Teaching Seminar at the College.

Students take the following courses (course descriptions and details may be found in The Education Department section of this catalog): Education 595A, 595B, 595C, 595D, 403 or 595E and 595F, 560, 561, 564 or 565 or 566.

#### TOTAL PROFESSIONAL PROGRAM FOR CERTIFICATION 26 S.H.

### (4) Additional Courses for M.A. Degree

		G
Required	Courses	

Students may choose, with advisement, additional electives in general education or in the subject matter specialization requirement.

Selected matriculated students may be invited to develop a Master's thesis of quality under the guidance of a thesis advisor for which four (4) semester hours of elective credit will be allowed.

Minimum: 40 s.h.

(Students must complete at least 32 semester hours of graduate work in The Montclair State College Program)

#### MASTER'S DEGREE PROGRAM PATTERNS

(all majors except Education Department)

The curriculum pattern for each of the Master's degree programs includes experiences in three areas: 1) Basic professional education; 2) general education, and 3) subject matter specialization.

I. General Education — Requirements for the Master's Degree insure that students undertake some broadening experience which will extend their studies outside of their speciality and even their profession. These graduate general education courses, to be chosen under careful guidance in accordance with the student's background, are designed to show the inter-relationships of the major fields of learning. Courses selected must be outside the student's undergraduate major, graduate major, and the Education Department.

General Education Requirement: minimum 6 credits; maximum 12 credits.

II. Basic Professional Education — This portion of the graduate program is devoted to developing the general professional consciousness as well as the competence of each student. This is accomplished by studies necessary for all teachers—regardless of their field of specialization—relating to the profession as a whole as it relates to children and the society in which it functions. Students must select courses from the following list to satisfy the Basic Professional Education requirement.

from the following list to satisfy the Basic Professional Education require	ement.
Required of all M.A. candidates:	
Ed. 503 Methods and Instruments of Research	2 s.h.
Elect courses from the following:	
Graduate Courses:	
Ed. 500 Recent Trends in Secondary School Methods	2 s.h.
Ed. 514 School Law	2 s.h.
Ed. 550 Guiding the Reading Interests of Secondary School Students	2 s.h.
Ed. 560 Advaanced Educational Psychology	
Ed. 561 Child and Adolescent Development	
Ed. 562 Principles of Mental Hygiene	
Ed. 566 Psychology and Education of the Gifted	2 s.h.
Senior-Graduate Courses:	
Ed. 406 Educational Sociology	3 s.h.
Ed. 408 Selection & Utilization of Audio-Visual Materials	2 s.h.
Ed. 453 Social Psychology	3 s.h.
Ed. 492 Comparative Education	3 s.h.
Graduate and Senior-Graduate Related Courses:	
A student may receive credit for one or the other courses selected pair, but not both.	from each
Ed. 501 Tests and Measurements in Secondary Education - or	2 s.h.
Ed. 491 Measurement and Evaluation in Teaching & Learning	3 s.h.
Ed. 564 Psychology and Education of Exceptional Children: Physical a	
Mental — or	
Ed. 452 Psychology and Education of the Handicapped	

Ed. 565 Psychology and Education of Exceptional Children: Social

and Emotional — or

2 s.h.

#### GENERAL INFORMATION

Ed.	452	Psychology and Education of the Handicapped	3	s.h.
Ed.	580	Principles and Techniques of Guidance — or	2	s.h.
Ed.	451	Guidance for the Classroom Teacher	3	s.h.

Basic Professional Education Requirement: minimum 6 credits; maximum 9 credits.

III. Specialization — A considerable portion of the graduate program is devoted to increasing the student's competence as a teacher. Studies in this category include additional work in the content of his major and related fields, and in the utilization of this content in the public school curriculum.

It is important that each student have experience in the systematic acquisition, preparation, and analysis of information relevant to some problem in his field of specialization. The candidate is required to show competence in executing and reporting an independent research study, field experiment, master's thesis or similar creative activity. Opportunity for this activity is provided in the specialization aspect of the student's program.

The student may choose to satisfy this requirement in one of two ways:

- A written report of superior quality of an approved study—or equivalent creative production—in connection with one of the seminars in his program. The project will be directly related to the purposes of the program in which the student is enrolled, or
- A formal research thesis carried on under the direction of a thesis advisor. Students wishing to complete a formal thesis will register and may earn four semester hours of credit for this activity.

Specialization Requirement: minimum 11 credits; maximum 20 credits.

TOTAL MASTERS OF ARTS ...... Minimum: 32 s.h.

### Graduate Research and the Master's Thesis

#### Research

Courses and seminars will introduce the student to research methods in the several disciplines and indicate what and where are the basic sources of information. They will require him to survey the professional literature of his major. An advanced study, essay, or research report is required in all the Master's degree programs by means of the departments' seminars.

Creative work, or distinguished performance involving intellectual, as well as, technical mastery, may be substituted in the programs in the arts, music, literature, etc. The essential element in this type of experience is independent work in depth by the student, whatever its form. Whether or not it is carried out in connection with the student to work independently on his own and to demonstrate his capacity to find, assess, organize, treat, and interpret his materials in a scholarly manner.

As the basic style and guide for research reports, investigations and theses, the Graduate Council has adopted William G. Campbell's Form and Style in Thesis.

#### The Master's Thesis

To encourage scholarly students to develop a thesis, a department may accept it as equivalent to the required seminar, and/or in lieu of all or part of the final comprehensive examination. Students writing a thesis must receive the approval of their departmental advisor and the Chairman of Graduate Studies, and must register for the course, Graduate 600, Master's Thesis, for four semester hours. Information which will aid students submitting a Master's thesis is available in the Graduate Office.

Students are expected to complete the thesis within one calendar year. An extension of time may be granted by the Chairman of Graduate Studies after consultation with the student's advisor. If granted, the student must re-register for Graduate 600 on a no-credit basis and pay a fee for two semester hours. This extension will be for six calendar months. The thesis must be submitted six weeks prior to commencement.

### Admission and Matriculation for the Master's Degree

- 1. The applicant for admission to any of the Master's degree programs should be a graduate of an accredited college or university and must present evidence of his qualifications for advanced study as shown by a high scholastic record, professional teacher-education training, and experience. The College may require an applicant with a doubtful undergraduate record or a Bachelor's degree from a non-accredited institution to take qualifying examinations, such as the Graduate Record Examination or any other suitable test it may consider necessary, to determine a student's acceptability for matriculation in the Master's degree program of any department.
- 2. It is in the student's own interest that he determine his eligibility for matriculation before initiating a program of graduate study. However, his formal matriculation (i.e., official acceptance in writing by the Graduate Office in a program leading to the Master's degree) may be deferred for good reason until no more than eight semester hours of graduate credit have been earned.
- 3. Prior to admission and matriculation, each student indicates the Master's degree area in which he will complete such courses as are prescribed. Upon his formal acceptance, an official work program is made out in conference with a departmental advisor appointed for this purpose.
- 4. To be eligible for matriculation in a major subject area, a student must present evidence, in the form of an official undergraduate transcript, of work in the undergraduate major as indicated in the departmental statements describing the various programs.
- 5. Since the College is a professional institution, applicants for matriculation in these programs must possess a valid certificate to teach the subject of specialization in the secondary schools of the State of New Jersey. Applicants who are not so certified should study the information relating to certification and the Master's degree on pages 14 and 34.
- 6. To be eligible for matriculation in the several professional education programs in the Department of Education, except the major in teaching, it is required that a student be certified to teach in New Jersey and also to have acquired some successful teaching experience. Two full years of experience are required for acceptance in the program in Administration and Supervision, and one full year for Personnel and Guidance.

# Steps in the Matriculation Process

- The applicant secures an application form in the Graduate Office which must be completed and returned to that office together with, a) a personal statement of his objectives as required on the application form; b) a check or money order for the required application fee; and c) a photo copy of his teaching certificate.
- 2. The applicant will have his college send official transcripts of all college credits (if the applicant is not a graduate of Montclair) to the Chairman of the

#### GENERAL INFORMATION

Graduate Studies. The completed application, fee, and official transcripts should be on file in the Graduate Office at least one month before the time of registration for graduate courses.

- 3. A review of the student's undergraduate record and other qualifications will be made in the Graduate Office. The applicant will then be notified as to what action has been taken on his application.
- 4. The applicant who meets admission requirements will next confer with the graduate advisor in the department in which he expects to do his work and when he is eligible for matriculation, the advisor will develop a formal program of courses with him.
- 5. A final conference with the Chairman of Graduate Studies may be arranged, if necessary. Following this, the applicant will be advised in writing of the decision of the Graduate Council, and if accepted, he will be furnished with a statement of the course of study (Official Work Program) to be completed within a six-year period.
- 6. Final action on all applicants is vested in the Graduate Council. For good reason, legitimate adjustments may be made at any time in the student's original program, with the approval of his program advisor and confirmation of this action by the Chairman of Graduate Studies. (Amendments of this nature are made on an appropriate form available in the Graduate Office.)

## Types of Admission in the Degree Programs

- 1. Regular admission for applicants eligible to be fully matriculated.
- Conditional (granted because specific undergraduate course deficiencies exist or for other reasons).

#### Procedure for the Admission of Veterans

A prospective student with the special classification of a veteran should determine his admission status with the Graduate Office before making application for a Certificate of Eligibility for matriculation.

# Requirements for the Master of Arts Degree

1. Minimum Number of Semester Hours

A minimum of thirty-two semester hours of graduate credit is required in all departments. Additional hours may be added to compensate for any deficiencies found in the applicant's undergraduate record. A minimum of forty semester hours is required in the program with a major in teaching.

2. Specialization

Each major department requires eleven to twenty semester hours of graduate work in the area of specialization.

3. Basic Professional Education

Six to nine semester hours of the required total semester hours must consist of basic professional education courses in the Department of Education. One two-semester hour course in this group, Education 503, Methods and Instruments of Research, is required of all students matriculated in the Graduate Division and must be taken in residence. The major in teaching program requires a three semester hour research course, Education 595G, "Action" Research for Teachers, and must be taken in residence.

#### 4. General Education

Six to twelve semester hours of the required total semester hours must consist of courses in general education.

#### 5. Departmental Seminar

Each candidate (matriculated after August 31, 1959) must complete an approved seminar in the department of his major subject. Education 503, Methods and Instruments of Research, is a prerequisite for this required seminar.

#### 6. Grades

An average grade of "B" or better is required for work submitted for the Master's degree. No graduate credit is given for work below "C."

#### 7. Graduate Level Courses

The majority of the courses taken or credits earned should be on the 500-600 level.

#### 8. Time Limit

Work for the Master's degree must be completed within six years after the date of matriculation. If an extension of time is required, a request for such extension must be filed with the Chairman of Graduate Studies. The student's progress will then be reviewed and evaluated in accordance with the requirements for the degree as stated in the most recent Graduate bulletin and with the established policy for this type of reinstatement. The policy statement may be obtained from The Graduate Office.

#### 9. Comprehensive Examination

A comprehensive departmental examination or its equivalent is required in all departments. This examination may be written and/or oral. The oral phase of the examination will be on an individual basis. The examination is given during the Spring semester, prior to graduation, by the department in which the student does his major work. (Consult the Part-Time and Extension announcements for dates.)

#### 10. Thesis

Four of the total credits can be satisfied by a thesis which meets the approval of the Graduate Council. In some departments the thesis may be offered in place of the written comprehensive examination, and/or the oral examination.

#### 11. Residence Requirements

- a. A minimum of thirty-two semester hours of graduate work in residence is required except as noted in item 12.
- b. The student must attend the College as a full-time graduate student for at least one summer session (six semester hours), or one regular semester (twelve semester hours) to meet the residence requirements.

Fully employed teachers are encouraged to restrict the graduate work carried during the year, and to take advantage of the course offerings in the summer session when their normal professional responsibilities will not interfere with the study expected of advanced students.

#### 12. Transfer Credit

With the approval of the student's program advisor and the Chairman of Graduate Studies, a graduate of an accredited college or university who has matriculated on or after April 12, 1962, may transfer some graduate credits. The maximum amount of credit which may be accepted is eight semester hours. The usual procedure is to arrange in advance for this privilege, and to make application for acceptance on a form available in the Graduate Office.

#### GENERAL INFORMATION

#### 13. Certification Evidence

To receive final approval by the Registrar as a candidate for the degree, the student must have evidence in his official file in the Graduate Office to indicate that he has met the certification requirements for the program for which he was matriculated. This evidence may consist of either a photocopy of the essential certificate to teach, or a letter of eligibility.

#### 14. Application for Conferment of the Degree

Candidates must file with the Registrar an application for conferment of the degree as follows:

Nov. 15 for the following June commencement

Mar. 15 for the following September commencement

Application blanks for this purpose may be secured from the Registrar. Responsibility for the request rests with the candidate. This is of special significance to the teacher-in-service who may have distributed his graduate work over five or six years.

#### 15. Attendance at Commencement

Attendance is required at commencement, unless permission for graduation in absentia is granted by the President of the College.

### Information Relative to the Implementation of Program Policies

#### 1. Explanation of the Course Numbering System

#### a. Eligibility for enrollment

Courses in the 500 and 600 series are open only to graduate students. Those in the 400-499 series and listed in this bulletin may be selected by graduate students for graduate credit. When courses in this series are given for certification and/or the Master's degree programs, they will be open only to those advanced advanced senior-undergraduates with a high scholastic average who receive the written approval of the Dean of the College. (A special form provided for this must be obtained in the Graduate Office.)

To be eligible for a course, students must have completed the logical prerequisites for it, as well as any specific prerequisites indicated in the course description.

#### b. Master's Degree Credit

The responsibility of taking the right courses for the program being pursued rests with each student. It is important that at each registration period the student bring with him his official work program, together with his transcripts of graduate work taken at this College so as to avoid taking courses that cannot be counted toward the degree.

#### c. Special Restriction for Graduate Program Credit

- 1) No credit is granted toward the Master's degree for courses with a grade below "C," or for certain specifically designated basic courses on the 400 level which are required for initial certification.
- No credit is granted toward the Master's degree for courses taken more than ten years prior to the date on which the student expects to receive his degree.
- 3) No more than eight semester hours of graduate credit taken prior to matriculation, or more than six semester hours of graduate credit in extension (off-campus courses) may be credited toward the Master's degree.
- 4) No graduate credit is granted retroactively for work taken in excess of undergraduate degree requirements.

- 5) No graduate credit is allowed for concurrent registration (enrollment) in other colleges without the approval of the Chairman of Graduate Studies.
- 6) No graduate credit is granted for courses in which a student who has been an auditor, decides to take the course for credit, without official permission. Such changes must be made before the mid-point of the semester.
- 7) Since some course numbers have been changed, responsibility for avoiding duplication is placed upon the student. No course once taken for credit may receive credit a second time under another number.

#### 2. Grading System

Marks indicating degrees of achievement in the various courses are given in letters A, B, C, D, and F.

A-Excellent

B-Good

C-Fair

D-Poor (No "D" credit may be counted toward the Master's degree)

F-Failure

Inc.-Incomplete Work\*

WP-Withdrawn, passing

WF-Withdrawn, failing

"Where a student has had an unavoidable absence, or presents other good reasons in accord with approved policy, a course may be marked "Incomplete" at the end of a semester or summer session. This mark must be removed by a final grade, or the course cannot be credited and the mark becomes "F" automatically. Incomplete grades assigned during he spring semeser or summer session must be cleared before November 15. Fall semester incomplete grades must be cleared before April 15.

#### 3. Retention Standard

The Chairman of Graduate Studies and the student's program advisor may, for good reason, revoke the matriculated status of any one who is found to lack the qualifications of personality, integrity, temperament, emotional adjustment, or physical stamina, or after it has been established that there is evidence of serious unprofessional conduct.

A student who does not maintain an acceptable standard of scholarship (an average of "B" or better) will be placed on probation. If it then becomes apparent that he is unlikely to achieve an acceptable standard, he will lose his status as a matriculated student.

#### 4. Student Load

Graduate work should involve careful and intensive study with ample time to explore areas which may warrant further study. Twelve to sixteen hours of work per semester is considered a full-time program for the graduate student in residence.

For teachers, or others employed full time, six hours of work in any one semester shall be the maximum load, with four semester hours recommended. In the regular six-week summer session, the maximum load shall be eight semester hours. However, the Graduate Council strongly recommends that the student consider six semester hours of work a full program.

#### 5. Fees and Service Charges

Tuition

New Jersey Residents and Teachers

per semester hour of credit \$16.00

#### GENERAL INFORMATION

Non-Residents per semester hour of credit	18.00
Service Charge per semester hour of credit	.50
Registration (non-refundable)	2.00
Late Registration (non-refundable)	5.00
Application for admission to a program (non-refundable)	5.00
Transcript (Inquire in Registrar's Office)	1.00
Supervised Student Teaching (if required)	60.00
(This fee is in addition to the credit fees stated above)	
Dormitory (including room, breakfast, lunch, and dinner for a summer	
session) per week	22.75
All checks should be made payable to Montclair State College.	

All charges are payable during the registration period.

These charges are subject to revision.

#### 6. Change of Schedule or Program

No student will be permitted to change his scheduled courses without the approval of his advisor and the Director of Field Services. The deadline for making changes is the last day of the late registration period. To change from "auditor" to "credit," or vice versa, a student must make formal application not later than the mid-point in the semester. Forms are available in the Graduate Office.

#### 7. Withdrawal from a Course

A written notice filed in the office of the Director of Field Services is required. (Refunds are computed from the date of receipt of such written notice.) Students who do not submit a written notice will receive the mark of "F" in those courses which they cease to attend. Non-attendance at classes or oral or written notification to the instructor does not constitute a formal withdrawal.

Students who withdraw after the mid-point in the semester will receive an automatic grade of "F," except in certain very exceptional cases that receive approval.

#### 8. Course Offerings and Schedules

Regular bulletins are published for the information of those who wish to attend part-time, extension, or summer session courses. These contain a list of courseofferings, time of class meetings, room assignments, and instructors for the scheduled classes. Other information may be obtained from the Director of Field Services, Montclair State College, Upper Montclair, New Jersey.

#### 9. Programs, Regulation, and Procedures are Subject to Change

A continuous effort will be made to keep students informed of all important changes in the policies or procedures of the Graduate Division; however, each student is given the responsibility of keeping himself informed of the present status of the graduate program and his progress toward the Master of Arts degree.

#### DEPARTMENT OF BUSINESS EDUCATION

Graduate Advisor: DR. LOUIS C. NANASSY

The graduate work in the Department of Business Education is designed to prepare teachers of business education for administrative, supervisory, specialized work, or master teaching in the field of business education and distributive education. In order to attain these objectives the candidate has an opportunity to supplement his undergraduate program and to explore advanced areas of work in accordance with his individual background, experience, achievement, and professional needs.

Graduate work toward the Master of Arts degree in Business Education presupposes the completion of an undergraduate major in business or distributive education, or its equivalent. The undergraduate major is based on the requirements as established by the New Jersey State Board of Education. For further details see the Undergraduate Bulletin.

All candidates for the Master of Arts degree in Business Education must pass a comprehensive oral and written examination before they are granted the degree. This examination is given in the Spring Semester for those candidates anticipating graduation in June or September. It is general in nature and is intended to test the candidate's maturity of thought with respect to business and distributive education.

## REQUIREMENTS FOR THE M.A. DEGREE IN BUSINESS EDUCATION

I.	Ger	ieral .	Educai	tion (see Master's Degree Program Patterns)	6-12	s.h.
II.	Basi	c Pro	fession	al Education (see Master's Degree Program Patterns)	6-9	s.h.
m.	Spec	ializa	tion		11-20	s.h.
	A.	Requ	ired C	Courses		
		B.E.	501.	Principles and Problems of Business Education	2	s.h.
		B.E.	603.	Research Seminar in Business Education	2	s.h.
		Requ	iired, a	it least two of the following courses:		
		B.E.	511.	Improvement of Instruction in Bookkeeping, Accounting	,	
				and Business Arithmetic	2	s.h.
		B.E.	512.	Improvement of Instruction in General Business Subjects .	2	s.h.
		B.E.	513.	Improvement of Instruction in Stenography and		
				Secretarial Practice	2	s.h.
		B.E.	514.	Improvement of Instruction in Typewriting and		
				Clerical Practice	2	s.h.
		D.E.	551.	Improvement of Instruction in Distributive Education .	2	s.h.
	В.	Elect	ives in	Business Education and/or Distributive Education	6-12	s.h.

#### REQUIREMENTS FOR THE M.A. DEGREE IN DISTRIBUTIVE EDUCATION

I. General Education (see Master's Degree Program Patterns)	6-12	s.h.
II. Basic Professional Education (see Master's Degree Program Patterns)	6-9	s.h.
III. Specialization	11-20	s.h.

#### A. Required Courses

Holders of a New Jersey teacher's certificate in the field of business education who complete the following required specialization courses will be eligible for certification in Distributive Occupations. Courses will be waived that have been completed (or their equivalents) at either the graduate or undergraduate level, prior to admission to the program.

Minimum: 32 s.h.

#### BUSINESS EDUCATION

When courses are waived, students seeking a master's degree can fulfill the specialization requirement by substituting courses from list "B. Electives in Distributive Education."

D.E. 414.	Merchandising (Marketing & Distribution)	2	s.h.		
D.E. 452.	Principles of Vocational Education	2	s.h.		
D.E. 453.	Curriculum Development in Distributive Education	2	s.h.		
D.E. 454.	Principles & Methods in Distributive Education	2	s.h.		
D.E. 455.	Coordination of Distributive Education	2	s.h.		
D.E. 456.	Organization and Administration of Distributive Education	2	s.h.		
D.E. 551.	Improvement of Instruction in Distributive Education	2	s.h.		
D.E. 552.	Advanced Salesmanship				
D.E. 553.	Trends in Retail Distribution	2	s.h.		
B.E. 603.	Research Seminar in Business Education	2	s.h.		

Work Experience—Certification for Distribution Occupations requires two years of approved work experience in distributive occupations. This requirement may also be fulfilled by successful completion of the following:

Full-time coordinated and supervised work experience in an approved work station for the months of July and August (minimum of 8 weeks is required for D.E. 450. and also for D.E. 451. One evening class session a week is scheduled with the work program to discuss the progress and program.

#### B. Electives in Distributive Education

D.E. 406.	Advertising	2 s.h.
D.E. 417.	Marketing	2 s.h.
D.E. 418.	Retail Store Management	2 s.h.
D.E. 419.	Merchandise Information	2 s.h.
D.E. 422.	Visual Merchandising	2 s.h.
D.E. 423.	Buying for Distribution	2 s.h.
D.E. 522.	Advertising Media	2 s.h.
D.E. 554.	orkshop in Problems of Distributive Education	2 s.h.
D.E. 555.	Credits and Collections	2 s.h.
	Retail Personnel Administration	2 s.h.
D.E. 557.	Sales Management	2 s.h.
	Executive Leadership in Retailing	2 s.h.
D.E. 559.	Development of Retail Training Programs	2 s.h.
	Minimum: 3	2 s.h.

#### Graduate Courses in Business Education

#### B.E. 501. Principles and Problems of Business Education

2 s.h.

2 s.h.

Survey of basic principles and practices of business education. Topics include history of business education, objectives, relationship of business education to general education, trends and problems in the field.

#### B.E. 502. Evaluation of Current Literature in Business Education 2 s.h

Introduces the literature of business education to the graduate student from a research point of view. Current literature from all sources—articles, research papers, books—are evaluated, using selected criteria for such evaluation.

#### B.E. 503. The Business Education Curriculum

Study of curricula in business education for various levels and types of schools. Evaluation of specific programs; development of improved curricula.

# B.E. 504. Evaluation and Measurement in Business Education 2 s.h.

Constructing, administering, interpreting, and evaluating all types of testing and evaluation materials in business subjects.

#### B.E. 505. Administration and Supervision of Business Education 2 s.h.

Study of problems of organizing, directing, and supervising business education programs at the secondary school and collegiate levels.

#### Improvement of Instruction in Bookkeeping, Accounting, and B.E. 511. Business Arithmetic

Study of objectives, content, methods, teaching aids, and evaluation procedures. Prerequisites: Undergraduate methods course in bookkeeping and teaching experience.

#### B.E. 512. Improvement of Instruction in General Business Subjects

Study of objectives, content, methods, teaching aids, and evaluation procedures for courses such as general business, economic geography, business law, and consumer education. Prerequisites: Undergraduate methods course in general business and teaching experience.

#### B.E. 513. Improvement of Instruction in Stenography and Secretarial Practice 2 s.h.

Refinement of teaching and personal skills, introduction to the latest instructional equipment and method are emphasized through demonstration, participation, and reading. Prerequisites: Undergraduate methods in stenography and teaching experience.

#### Improvement of Instruction in Typewriting and Clerical Practice

2 s.h.

Emphasis is placed on refinement of teaching and personal skills in typewriting and business machine operation. Latest recommended teaching techniques are examined, demonstrated, and evaluated. Prerequisites: Undergraduate methods in typewriting and teaching experience.

#### B.E. 521. Business Management Problems

2 s.h.

The problems approach is used in this advanced course in considering such topics as business ownership, finances, location and layouts, purchasing, personnel, and managerial controls.

#### B.E. 523. Auditing

This course develops the meaning and techniques of auditing procedure. It includes practice in the fundamental mechanics of auditing as well as in making of the formal report on an audit. Prerequisite: 8 semester hours of accounting.

#### B.E. 524. Advanced Tax Problems

2 s.h.

Preparation of tax returns for partnerships, trusts, corporations, and complicated individual tax returns. Also inheritance taxes, gift taxes, social security taxes, and tax benefits and returns required under social security tax law.

#### B.E. 525. Accounting Systems and Data Processing

Deals with analysis of accounting systems and the organization of accounting information for use with manual and automated methods.

#### B.E. 526. Advanced Business Law Cases

Designed to furnish a broad understanding and background in areas requiring considerable training to be effective in the classroom. Cases are concerned with the topics of contracts, negotiable instruments, insurance, bailments, carriers, sales, property, landlord and tenant, torts, and business crimes. Prerequisite: 6 semester hours of business law.

#### B.E. 527A, B, C, D Workshop in Clerical and Secretarial Practice, Advanced Stenography, Advanced Typewriting, Office Machines 2 s.h. each

These workshops, which many run simultaneously, provide opportunity for the study, planning, and development of teaching materials and projects fitted to the particular situation in which the person is teaching. Instruction is on an individual and smallgroup basis with occasional seminar meetings of the entire group. Prerequisite: Teaching experience in the field.

## B.E. 528. Field Studies in Business Education

2 s.h.

Provides opportunity for the classroom teacher to visit and evaluate some of the practices of business offices, industries, and retailing organizations located in the metropolitan area. Experience is gained in planning, conducting, and follow-up of field trips.

#### Audio-Visual Aids in Business Education

2 s.h.

This course develops knowledge and skill in using the many audio and visual aids available in teaching business subjects. Opportunity is provided for developing and constructing teacher-made audio-visual aids.

#### B.E. 603. Research Seminar in Business Education

2 s.h.

Includes study and analysis of significant research studies in business education, investigaton of procedures in educational research, and techniques of thesis writing. Outline of research project approved in Education 503 is developed and completed as partial requirement of this seminar. Prerequisite: Education 503.

#### Senior-Graduate Courses in Business Education

#### B.E. 404. Business Economics

3 s.h.

Although the nature and scope of economics is presented, this course deals primarily with the business aspects of economics as related to the free enterprise system, money credit and banking, Gross National Product, and devices measuring economic progress. The Federal Reserve System, business fluctuations and business cycles, taxation and government finance are also included as specific areas of course coverage.

#### B.E. 405. Office Practice-Clerical

3 s.h.

Much of the work in this course involves the use of machines—calculating, duplicating, bookkeeping, special typewriters, and transcribing machines. Filing is also part of the course.

#### B.E. 407. Office Practice-Secretarial

3 s.h.

This course familiarizes the prospective teacher of secretaries with the operation of voice-writing and duplicating equipment. The duties of the secretarial worker are studied. Understanding of office procedures and stenographic skills are strengthened through supervised office assignments and class work projects.

#### B.E. 408. Business Finance

3 s.h.

This course deals with the processes involved in the financing of business organizations from the time of their inception and promotion, during operation and expansion, and during the period of reorganization. Problems involving financing by means of stocks, borrowing capital, mortgages, bonds, and notes are solved.

#### B.E. 409. Consumer Education

3 s.h.

Consideration is given to the role of the consumer in the economy, some of the forces affecting consumer demand, governmental and private agencies aiding the consumer, and development of intelligent techniques for buying and using consumer goods and services.

#### B.E. 410. Advanced Accounting

3 s.h.

This advanced course for students who have had two years of accounting emphasizes problems related to basic accounting principles, cost accounting, and intermediate accounting. Topics considered include determination of net income, valuation, consignments, preparation and analysis of financial statements, partnerships, and bankruptcy. Prerequisite: B.E. 402 or college equivalent.

#### B.E. 411. Tax Accounting

2 s.h.

The purpose of this course is to give a comprehensive picture of the Federal tax structure. Extensive training is provided in the application of basic principles to the specific problems of the individual. All forms involved in individual tax returns are studied. Prerequisite: 12 semester hours of accounting.

#### B.E. 412. Project Development in Consumer Education

2 s.l

This course permits the students to explore in a specialized fashion two major areas of consumer education. Projects are developed on housing and furnishing of a home, which illustrate the handling of material and the procedures that might be used in developing other consumer education units. Prerequisite: A course in consumer education or economics.

#### B.E. 421. Finance and Investments for Families

2 s.h.

This is a general course in investments, trusts, and estates. It concerns itself with types of securities, diversification, sources of information, operation of the stock market, and analysis of financial statements. Also covered are trusts, wills, and estate planning.

#### B.E. 431. Data Processing-Introduction

2 s.h.

The primary purpose of this course is to familiarize the classroom teacher with

literature and vocabulary of data processing; to study input and output media; types of equipment; to examine actual installations; and to consider data processing in terms of the high school program and high school placement. The significance of job analysis and systems development is stressed.

#### B.E. 449. Supervised Business Work Experience and Seminar 2 s.h.

The student who has not had extensive business experience has an opportunity to work full-time for six weeks during the summer in a business position under College supervision. An evening conference is held weekly to discuss problems related to the work experience program.

#### GRADUATE COURSES IN DISTRIBUTIVE EDUCATION

#### D.E. 522. Advertising Media

2 s.h.

This course in advertising offers an opportunity to study in some detail the uses of various advertising media such as newspapers, magazines, radio, television, and direct mail, and to evaluate their effectiveness in terms of campaigns.

### D.E. 551. Improvement of Instruction in Distributive Education 2 s.h.

This course gives the experienced distributive education teacher an opportunity to study the content, method, teaching aids, and evaluate procedures in instruction in the distributive education program.

#### D.E. 552. Advanced Salesmanship

2 s.h.

The behavorial science of selling is covered including the strategy of selling, importance of timing, tailoring selling to the individual prospect, sales psychology behind the demonstration, creative selling, and the nature of the prospects' motivation. Sales executives are invited to the classroom to answer questions and relate personal experiences of the professional salesman.

#### D.E. 553. Trends in Retail Distribution

2 s.h.

A comprehensive introduction to and evaluation of the field of retailing. The trends that indicate the future structure and functioning of the retail field, including consumer and marketing developments, are considered. Current periodic literature is examined and outside speakers are used to supplement classroom lectures.

#### D.E. 554. Workshop in Problems of Distributive Education

2 s.h.

Intensive analysis of problem-solving in distributive education programs. Discussion on individual problems and experiences in teaching and administering distributive education programs. Committee work-seminar method is used.

#### D.E. 555. Credits and Collections

2 s.h.

Study is made of the nature, basis and meaning of credit and credit control. Topics include functions of credit, credit instruments, types of credit, elements of determining credit risk, sources of credit information, and collection procedures.

#### D.E. 556. Retail Personnel Administration

2 s.h.

The objective of this course is to develop a comprehensive understanding of the personnel responsibilities of all retailing executives. A critical evaluation of current personnel policies and practices of successful retail stores is made. Visiting store executives are invited to discuss personnel administration in the classroom.

#### D.E. 557. Sales Management

2 s.h.

The place of the sales manager in modern retail marketing is covered as well as sales organization, sales operations, sales planning, and sales analysis. Also considered are the selection and training of salesmen, ethical problems in sales management, and social responsibilities of a sales manager in today's marketing operations.

#### D.E. 558. Executive Leadership in Retailing

2 s.h.

The objectives of this course are to acquaint the students with and to make them aware of the kinds of inter-relationships among people in the retail organization, as well as to give the student insight into the techniques and problems of the modern executive. Awareness of the leadership required and the need for decision making are covered.

#### D.E. 559. Development of Retail Training Programs

2 s.h.

Analysis of training problems confronting managers in both line and staff positions are covered. The course includes both selling and non-selling programs, the training of new and present employees, general training of personnel in the store as it relates to store policies, store organization, and morale. Job analysis and evaluation as well as training of executives and supervisors for transfer, promotion, and versatility are considered.

#### SENIOR-GRADUATE COURSES IN DISTRIBUTIVE EDUCATION

#### D.E. 406. Advertising

2 s.h.

A comprehensive view is given of the policies and procedures involved in the planning, preparation, and application of advertising in a retail store. A critical approach is taken to the problems confronting the field of advertising and sales promotion. Consideration is given to the definition of sales promotion, objectives, establishment of policies, analysis of sales potentials, evaluation of media and agents, coordination and follow-up of sales promotion and advertising. (Part-time work experience recommended when taking Advertising.)

#### D.E. 414. Merchandising

2 s.h.

This course analyzes the problems of how, what, where, and when to buy; terms of purchasing, tested receiving and marketing procedures; mathematics of merchandising—setting retail price, planning mark-up and mark-down; and inventory controls. (Parttime work experience recommended when taking Merchandising.)

#### D.E. 417. Marketing

2 s.h.

A study of the principles underlying the distribution and services from the manufacturer to the consumer. Marketing policies and practices are covered as well as the evolution and change of marketing procedures and recent governmental activities affecting marketing. A managerial approach to the subject is given.

#### D.E. 418. Retail Store Management

2 s.h.

The main objective of this course is to acquaint students with the problems involved in the successful operation of a retail organization. Attention is given to the preparation of the store for busness, the movement of merchandise from the source to the store, the preparation of the goods for sale, the movement of the goods to the selling floor and then to the customer. Customer adjustment policies, store protection, and the latest kinds of equipment used by retail stores are also discussed and evaluated. (Part-time work experience recommended when taking Retail Store Management.)

#### D.E. 419. Merchandise Information

2 s.h.

Merchandise information, both textiles and non-textiles, are covered to give the student the background and selling information needed in the field of retailing. Students will be given standards for determining quality of products and a knowledge of how to care for them. Manufacturing processes of various products will be considered.

#### D.E. 422. Visual Merchandising

3 s.h.

A study is made of the basic principles and elements of color, line, form, texture, and space as they relate to displays, merchandising, and advertising. Topics include appropriate display space, lighting arrangements, improvisation of display equipment, the use of paper mache forms, seasonal displays, equipment, and care of display fixtures.

#### D.E. 423. Buying for Distribution

2 .1

A study of the techniques employed in performing the functions of the merchandise division of a store. The functions of the buyer and the many facets of the buyer, and problems in the store are discussed. Other topics included are customer demand analysis, comparison shopping, bargain hunting, and planning the buyer's budget. Buying fashions, staples for independent stores, chain stores, and resident buying offices, as well as foreign buying are covered.

#### D.E. 450. Supervised Work Experience and Seminar I

2 s.h.

Students will gain supervised paid-for work experience in a cooperating department

or mass merchandise (discount) store. As part of the supervised work program they attend a weekly evening seminar in which discussions will center on their activities in the stores and on their development of executive abilities during the training. Trainees are required to submit regular progress reports. Work program is in operation full-time during July and August (minimum of 8 weeks) of the summer session following completion of the sophomore year for undergraduates, and offered every summer for graduate and special students.

#### D.E. 451. Supervised Work Experience and Seminar II 2 s.

Supervised paid-for store experience is gained in a specialty or limited-price variety store. Students attend a weekly evening seminar in which discussions will center on their activities in the stores and on their development of executive abilities during the training. Trainees are required to submit regular progress reports. Work program is in operation full-time during July and August (minimum of 8 weeks) of the summer session following completion of the junior year for undergraduates, and offered every summer for graduate and special students.

#### D.E. 452. Principles of Vocational Education

2 s.h.

The purpose of this course is to acquaint educators and prospective educators with the basic principles and practices of vocational education. The course covers the cooperative Federal-State programs of vocational education developed under the Smith-Hughes Act, George-Barden Act, George-Deen Act, and the 1963 Vocational Education Act.

#### D.E. 453. Curriculum Development in Distributive Education 2 s.h.

The purpose of this course is to acquaint educators and prospective educators with the construction of the distributive education curriculum. Included are an understanding of the needs and interests of the community in curriculum planning, careful planning and group cooperation in curriculum, the over-all development of the pupil, developing vocational competencies in curriculum, adult education curriculum planning, keeping records and results through follow-up procedures, and the evaluation of curriculum.

#### D.E. 454. Principles and Methods of Distributive Education 2 s.h.

The purpose of this course is to acquaint educators and prospective educators with the basic principles of teaching distributive education as well as specific methods of teaching the program. Coverage includes the federal legislation as it relates to the program, coordinator's duties, methods in teaching store subjects, use of lecture and demonstration in teaching, forms, reports and manuals, planning the lesson, human relations for store personnel, visual aids, free sources of materials, textbook evaluation, trade journal use, and the DE club as a teaching device. Teaching demonstrations are also a part of the program.

#### D.E. 455. Coordination of Distributive Education

s.h.

The purpose of this course is to acquaint educators and prospective educators with the objectives of distributive education as they relate to the coordinated distributive education program. Included are the coordinator's job, basic factors of cooperative programs, the use of advisory committees, policies of local school systems, making pre-liminary surveys of the community, evaluating training possibilities, selecting training agencies, pupil selection, supervision and directed study methods. (Part-time work experience recommended when taking Coordination of Distributive Education.)

### D.E. 456. Organization and Administration of D.E. 2 s.h

The purpose of this course is to acquaint educators and prospective educators with the objectives of distributive education and with the details and problems of organizing and administrating as well as supervising a complete cooperative program in distributive education. Areas covered are: organization of vocational education on the federal-state and local levels, understanding the use of a state syllabus, setting up, supervising and operating a cooperative program, surveys of community needs and student needs, physical equipment requirements, advisory committees, and the use of public relations and extension programs.

#### DEPARTMENT OF EDUCATION

Faculty Advisors: Dr. Earl K. Peckham, Administration and Supervision
Dr. Earl C. Davis, Personnel and Guidance

Graduate courses in this department meet one or more of four needs: (1) instruction in the Administration and Supervision major leading to the M.A. degree and New Jersey certification for one or more of the positions of General Secondary Supervisor, Secondary School Principal, and Assistant Principal or Vice Principal; (2) instruction in the Personnel and Guidance major leading to the M.A. degree and New Jersey certification in guidance; (3) advanced professional instruction for administrators, supervisors, counselors, and classroom teachers; and (4) Master of Arts with a major in Teaching, designed to prepare liberal arts college graduates for teacher certification by combining certification requirements with additional work at the graduate level.

In pursuit of the above objectives most graduate courses in the Education Department are designed for students with teaching experience. Other graduate courses presuppose at least a teaching certificate.

Graduates students who do not hold teaching certificates will enroll in courses to meet certification requirements. Under special and unusual circumstances, uncertified graduate students may also enroll, with the approval of the Chairman of the Education Department, in the following graduate courses in the Education Department: 500, 502, 505, 506, 507, 535, 560, 562.

Graduate students working toward an M.A. degree in Administration and Supervision are required to have at least two years of teaching experience before matriculation; those majoring in Personnel and Guidance are required to have at least one year of teaching experience before matriculation.

Students who plan to remain classroom teachers are not encouraged to seek an M.A. degree in either Administration and Supervision or Personnel and Guidance.

Three years of successful teaching experience in grades 7-12 are required for secondary school principal and secondary vice principal or assistant principal certification.

# I. REQUIREMENTS FOR THE M.A. DEGREE IN ADMINISTRATION AND SUPERVISION

- A. Graduation from an accredited college or university, a New Jersey teacher's certificate, and two years of teaching experience completed prior to matriculation. Not more than eight semester-hours of work taken prior to matriculation may be counted toward this degree.
  - Those whose undergraduate work and experience were obtained outside of New Jersey must meet New Jersey certification and experience standards.
- B. Graduates of accredited colleges and universities may transfer not more than eight semester-hours of graduate work to be counted toward this degree upon approval by the Program Adviser and the Coordinator of Graduate Studies.
- C. Satisfactory completion of not fewer than thirty-two semester-hours of work as follows: (In exceptional cases appropriate substitutions or changes may be made in these requirements upon approval by the Program Adviser).

1.	Required	Courses	20	s.h.
	Ed. 503.	Methods and Instruments of Research	2	s.h.
	Ed. 510.	Introduction to Educational Administration	2	s.h.
	Ed. 512.	School-Community Relations	2	s.h.
	or			
	Ed. 514.	School Law	2	s.h.
	Ed. 516.	School Finance	2	s.h.
	Ed. 520.	Organization and Administration of the Modern H.S.	2	s.h.

		2 s.h.				
Ed. 535. Organiz	535. Organization and Administration of Extra-Curricular					
Activitie	28	2 s.h.				
Fd. 540. Supervis	ion in the Secondary School I	2 s.h				
Ed. 580. Principl	es and Techniques of Research	2 s.h.				
Ed. 529. Seminar	in Secondary School Administration					
and Su	pervision	2 s.h.				
	or					
Ed. 539 Seminar	in Curricular Organization	2 s.h.				
Education Departm	nent Electives (6 s.h.)					
The student, with	his adviser's approval, will select six semester-hou	irs in				

additional Education Department courses. 3. Electives in Other Departments (6 s.h.)

The student, with his adviser's approval, will select six semester-hours of course work in other departments. It is intended that the electives chosen shall be of a liberal-cultural orientation selected to broaden the student's

interests and background.

Usually not more than two semester hours should be selected from any one department.

4. Candidates for the Master's Degree in Administration and Supervision will be required to pass a comprehensive examination given in March in the year immediately prior to the planned graduation date.

# II. REQUIREMENTS FOR THE M.A. DEGREE IN PERSONNEL AND GUIDANCE

A. Graduation from an accredited college or university, a New Jersey teacher's certificate, and two years of teaching experience. One year of this experience must be completed prior to matriculation. (Not more than eight semesterhours will be counted toward this degree prior to the obtaining of this certificate and the beginning of this experience.)

B. Satisfactory completion of not fewer than 32 semester-hours as follows:

1.	Basic Requirements		
	Ed. 503. Methods and Instruments of Research	2	s.h.
	Ed. 567. Educational and Psychological Measurements in Guidance		
	Ed. 580. Principles and Techniques of Guidance	2	s.h.
2.	Select 4 s.h. from the following:		
	Ed. 560. Advanced Educational Psychology	2	s.h.
	Ed. 561. Child and Adolescent Development	2	s.h.
	Ed. 562. Principles of Mental Hygiene	2	s.h.
	Ed. 564. Psychology and Education of Exceptional Children		
	- Physical and Mental	2	s.h.
	Ed. 565. Psychology and Education of Exceptional Children		
	- Social and Emotional		
	Ed. 566. Psychology and Education of the Gifted		
	Ed. 568. Psychological Tests in Guidance Programs	2	s.h.
3.	Select 10 s.h. from the following (Ed. 580 is a prerequisite for all	of	the
	following.)		
	Ed. 581. Community Resources for Guidance	2	s.h.
	Ed. 582. Vocational Guidance	2	s.h.
	Ed. 583. Educational Guidance	2	s.h.
	Ed. 584. Social-Moral Guidance	2	s.h.
	Ed. 585. Group Guidance and Counseling Activities	2	s.h.
	Ed. 586. Elementary School Guidance Services	2	s.h.

	Ed. 587. Administration and Supervision of Guidance Programs 2 s.h.
	Ed. 588. Techniques of Interviewing and Counseling
	Ed. 589. Student Personnel Services in Higher Education
4.	Select 4 s.h. from the following:
	Ed. 601D. Workshop in Education — Guidance 2-4 s.h.
	Ed. 602. Research Seminar in Guidance
	Ed. 604. Field Work in Guidance 2-4 s.h.
	Ed. 606. Practicum in Guidance Services
5.	Free electives in any department of the college
,	C. I'l for the Manage Dance on account to non-a community

Candidates for the Master's Degree are required to pass a comprehensive examination.

Note: Deviation from the above program will be permitted only by permission in writing countersigned by the Coordinator of Graduate Studies and the Student's Program Adviser.

Graduates from accredited colleges and universities may transfer not more than eight semester-hours of graduate work to be counted toward this degree upon approval by the Coordinator of Graduate Studies.

# III. COURSE REQUIREMENTS FOR THE M.A. DEGREE (Major in Teaching)

### SECONDARY (7-12) AND SPECIAL FIELDS (K-12)

These Certificate and Master's Degree programs are designed especially for college graduates who wish to prepare to become elementary school teachers, or teachers of subjects such as art and music in the elementary and secondary grades. The content, organization, materials, and methods of these courses are designed with this consideration of the student's maturity, academic background, and experience. At present this M.A. program is open only to students with a science or mathematics background.

#### ADMISSION TO CERTIFICATE\* OR DEGREE PROGRAMS

Admission is restricted to those selected graduates of accredited colleges who indicate high potential for teaching, and to in-service teachers with emergency or provisional certificates.

College graduates not employed as teachers will be screened for admission with due consideration to:

- a. Suitability or character and personality for teaching
- b. Health examination
- c. Speech and writing competence
- d. Competence in teaching field, based upon undergraduate grades of B— or better (2.75 on a 4 pt. scale). Students who present lower grade point averages must also present scores earned on the Graduate Record Examination Aptitude Test.

In-service teachers holding emergency or provisional certificates, employed by local school districts, will be admitted to the program upon application, and agreement by the employing superintendent of schools to enter into a cooperative program of supervision of the student in connection with course Education 595E, 595F Supervised Teaching Seminar. During the first semester these students will complete the application procedure regarding character, health, speech, and writing, and preparation in subject-matter field. When the student completes six to ten semester hours work at Montclair, a decision will be made regarding matriculation for the M.A. degree. If as a result of failure to satisfy the screening criteria or unsatisfactory performance in the program it is considered necessary to withdraw a student, conferences will be arranged with the student and the employing superintendent as early as possible.

\*Students who successfully complete the Certificate Program will be recommended for appropriate New Jersey teacher certificates.

#### A. Basic Background Requirements

Prior to completion of the program the student must have, at either the graduate or undergraduate level a minimum of thirty semester-hour credits in general background courses distributed in at least three of the following fields: English, social studies, science, fine arts, mathematics, and foreign languages. Six semester-hour credits in English and six semester-hour credits in social studies will be required.

#### B. Subject-Matter Specialization

Prior to the completion of the program the student must have at either the graduate or undergraduate level, subject-matter background suitable in extent and coverage to constitute a teaching major in at least one field. Evaluation should be done through the certification advisor and departmental advisor.

#### C. Professional Requirements

Prior to completion of the Certificate and/or Master's degree programs, the student must have completed the following professional curriculum. Courses may be waived that have been completed (or their equivalents) at either the graduate or undergraduate level, prior to enrollment in the program. However, no student will be recommended for a certificate or a Master's degree who has not completed Student Teaching\* or the Supervised Teaching Seminar at the College.

Ed. 595A. Foundations of Education, Part I	.h.					
Ed. 595B. Foundations of Education, Part II	.h.					
Ed. 560. Advanced Educational Psychology 2 s.	.h.					
Ed. 561. Child and Adolescent Development 2 s.	.h.					
Elective from the following:						
Ed. 564. Psy. and Educa. of Exceptional Children: Physical and Mental 2 s	.h.					
Ed. 565. Psy. and Educa. of Exceptional Children: Social & Emotional 2 s						
Ed. 566. Psychology and Education of the Gifted2						
Ed. 595C. Structure and Organization of American Schools						
Ed. 595D. Curriculum and Methods of Instruction						
*Ed. 403. Student Teaching	.h.					
**Ed. 595E, 595F, Supervised Teaching Seminar 4 s.h. ea						

Although part of the professional program may be waived on the basis of previous college work, students are admitted to Education 403, Student Teaching, only after completing sufficient preparation at the college to enable the college to assess their potential as teachers and to recommend them to a school district as student teachers. \*\*Teachers in service on substandard certificates will substitute Education 595E, 595F, Seminar and Supervised Teaching. These students will be admitted to the program only with the prior permission of the local superintendent of schools, and agreement with the local school system regarding a program of joint supervision with the college. Unlike Student Teaching, the Seminar and Supervised Teaching may be the initial course in the student's program.

TOTAL PROFI	ESSIONAL PROGRAM	FOR CERTIFICA	TION 26	s.h.
D. Addition	al Requirements		14	s.h.
Ed. 595G.	"Action" Research for	Teachers	3	s.h.
Ed. 595H.	The Teaching of Co	mmunication Skills .		s.h.

Students may choose, with advisement, additional electives in general education or subject matter specialization.

Selected matriculated students may be invited to develop a Master's thesis of quality under the guidance of a thesis advisor for which four (4) semeser hours of elective credit will be allowed.

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If part of the professional requirements are waived on the basis of previous college work, students may take less than 40 s.h. of work at the College; however, to qualify for the Master of Arts degree, at least 32 semester hours of graduate work must be completed, under advisement, in the Montclair State College Program.

#### **GRADUATE COURSES**

Note: Students are not permitted to enroll in courses they have taken previously under other titles and/or other course numbers.

### Education 500. Recent Trends in Secondary School Methods 2 s.h

This course emphasizes the fundamental principles underlying the technique of teaching on the secondary school level. Some of the topics considered are: organization of knowledge, the logical and psychological aspects of method, developing appreciations, social-moral education, teaching motor control, fixing motor responses, books and verbalism, meeting individual differences, guidance in study, tests and examinations, marks and marking.

### Education 501. Tests and Measurements in Secondary Education 2 s.h.

The purpose of this course is to develop an appreciation of the meaning and importance of measurement in education, and to give a working knowledge of instruments of measurement.

# Education 502. Teaching the Block of Time Curriculum in the Junior and Senior High School 2 s.h.

This course concerns the structure, organization and methods of teaching block of time curriculums in secondary schools, after a discussion of underlying philosophy and historical development.

#### Education 503. Methods and Instruments of Research 2 s.h.

This course is required of all regularly matriculated candidates for the Master's degree without regard to their field of major interest. Its purpose is to introduce students of education to research and its practical application to professional problems. The course treats: the nature and types of educational research; methods and techniques of educational research; and the tools used in interpreting statistical data. During the course, the student completes his outline and may complete his research either in this course, in Education 603, or in his departmental seminar or research course It is recommended that this course be taken rather early in the graduate program and must precede work in departmental seminar or research courses. Prerequisite: Math. 320, Educ. 501, or equivalent, and M.A. candidate. Math. 320 does not carry graduate credit.

#### Education 505. The Two-Year College

2 s.h.

This course is designed to acquaint the student with the history, purposes, patterns, and trends of the two-year college, including the junior college, the community college, and university extension centers.

#### Education 506. Teaching in the Two-Year College

2 s.h

This course is designed to examine the instructional problems in public two-year colleges are they are affected by: the student population, the curriculum functions, the organization of the program, and the guidance responsibilities of the teacher. Field study visits to nearby two-year colleges are required. Prerequisite: Educ. 505.

#### Education 509. Basic Educational Concepts

2 s.h.

This course deals with a study of those concepts or principles which have gradually emerged from the mass of educational theory, practice, and research to a point where they have been generally validated and accepted. Such a study is intended as a summarization aimed at achieving a better perspective of the relationship of specific items to the total educational pattern. Prerequisite: Educ. 510.

#### Education 510. Introduction to Educational Administration 2 s

This is the basic course in the organization and administration of the American school system at the national, state, intermediate, and local levels. The purposes and nature of school administration are studied. Other topics surveyed include: the superintendency, personnel problems, records and reports, plant administration, business administration, auxiliary services, administration of curriculum, instruction, guidance, and pupil personnel.

#### Education 511. School Business Administration

2 s.h

Topics considered in this course include: the role of business administration in public education, office management, budgetary procedures, financial accounting, payroll

administration, purchase and supply problems, insurance, debt service management, transportation, and food service. Prerequisite: Educ. 510 or equivalent.

#### Education 512. School Community Relations

2 s.h.

This course concerns the relation of the school to other educational efforts of the community. It considers the scope and types of agencies and informal influences of an educational nature, and also the agencies and methods by which the best total cooperative effort can be attained. It deals also with methods and plans of publicity. Constant reference throughout is made to New Jersey localities. Prerequisite: Educ. 510 or equivalent.

#### Education 514. School Law

2 s.h.

After an introductory general study of such topics as: legal theory, the separation of school government from other local government, the appellate function of the State Commissioner of Education and the State Board of Education, the course is concerned principally with a study of New Jersey school laws (Title 18 of the Revised Statutes) and decisions. (Students who have taken Educ. 500E, School Administration II: Law and Finance, for credit are not permitted to take either Educ. 514 or Educ. 516.)

#### Education 516. School Finance

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2 s.h.

After an introductory unit concerned with the current economic environment, this course is devoted to a study of state and local taxation, state school-aid theory and practice, school-district indebtedness, cost-quality relationships, Federal aid, fiscal controls, and the budgetary process. (Students who have taken duc. 500E, School Administration II: Law and Finance, for credit are not permitted to take either Educ. 514 or 516.) Prerequisite: Educ. 510 or equivalent.

# Education 520. Organization and Administration of the Modern High School 2 s.h.

The following topics are considered: the student personnel, building and revising the high school curriculum, providing for individual differences, making the school schedule, records, the guidance program, pupil participation in government, the extracurricular program, the health program, the safety program, discipline, library and study hall, cafeteria, the principal's office, and evaluating results. Prerequisite: Educ. 510 or equivalent.

#### Education 525. Secondary School Building Planning

2 s.h.

This course deals with the education planning of secondary-school buildings. The preparation of educational specifications and space requirements is considered. Topics considered include the planning of offices, classrooms, auditoriums, gymnasiums, laboratories, shops, libraries, cafeterias, and other spaces. Prerequisites: Educ. 520, 530 or equivalents.

# Education 529. Seminar in Secondary School Administration and Supervision 2 s.h.

In this course the class makes an intensive study of administrative and supervisory problems suggested by the educational events and trends of the year, by the interests and responsibilities of the members of the class, and by educational movements in New Jersey and the country. Each student does an individual piece of research which he reports to the class. This represents advanced work which depends upon previous study or experience in educational administration or supervision. Prerequisites: Educ. 503, 520 and 540 or equivalents.

#### Education 530. Curriculum Construction in the Secondary School 2 s.h.

The purpose of this course is to consider the extent to which the secondary school curriculum meets the needs of a changing civilization, and to consider effective means of curriculum construction. Prerequisite: Educ. 510 or equivalent.

# Education 535. Organization and Administration of Extra-Curricular Activities

2 s.h

The first part of this course considers such general problems of extra-curricular activities as: their growing importance; their relation to the curriculum; the principles underlying their organization, administration, and supervision; and methods of financing. In the second part, an intensive study is made of the home room, the assembly, the student council, clubs, athletics, school publications, and other activities in which the class is especially interested.

#### Education 538. Curriculum Construction in the Elementary School 2 s.h.

This course offers an opportunity to review state and city elementary curricula: to discuss the principles of curriculum construction; to collect new teaching materials for the various subjects; and to evaluate, organize, and grade these materials. Teaching procedures in the use of materials are discussed and evaluated in terms of pupil needs, the objectives set up, and the results obtained. This course offers an opportunity to make a special study of the materials and procedures to be used in the supervision of the language arts.

#### Education 539. Seminar in Curriculum Organization

2 s.h.

This course is for students actively engaged in problems of curriculum reconstruction and those who are anticipating committee work in this field. It concerns both the elementary and secondary levels. This represents advanced work which depends on previous study in the curriculum area. Prerequisite: Educ. 503, 530 or 538.

# Education 540 and 541. Supervision in the Secondary School, Part I II 2 s.h. each

These courses emphasize the more practical phases of supervision which are met most frequently by those engaged in it. Among the topics are: organization for adequate supervision, supervision as encouraging and guiding the growth of teachers and the improvement of educational procedures, the supervisory functions of teachers' meetings, discussion groups, general and professional reading, the writing of articles, cooperative curriculum modification, utilization of community resources, and teacher intervisitation.

# Education 550. Guiding the Reading Interests of Secondary School Students: Part I. Materials and Sources 2 s.h.

# Education 551. Guiding the Reading Interests of Secondary School Students: Part II. Needs and Services 2 s.h.

The purpose of these courses is to prepare teachers to discover and improve the reading interests and attitudes of their students. Useful to all content area teachers and specialists who assign recreational and research reading, Part I particularly deals with fundamental bibliographical tools, the classroom teacher's relationship to the library, current source materials in book evaluation, and techniques for determining book selection. In Part II the teachers write their own book annotations and reviews, establish readability and suitability criteria based on a growing knowledge of child development, help build collections and services for young people which meet their personal needs through reading. (Educ. 550 not open to those who have taken Eng. 547; Educ. 551 may be taken as Part II after Eng. 547.)

# Education 552. Principles of Reading Improvement in the Secondary School 2 s.h.

This is a course planned to present a deeper picture of the guiding principles and controversial issues which influence the teaching and learning of reading. Organized especially for the subject area teacher and the beginning reading specialist, recent non-clinical research and important professional and lay journals are studied to explore the pendulum of theory and practice in: the organization and administation of developmental reading programs, educational policies which affect reading, child development concepts and reading growth, systematic differentiation of individual needs, and reappraisal of the place of reading in our changing society. (Not open to those who have taken Educ. 556).

# Education 553. Techniques of Reading Improvement in the Secondary School

This is a practical course dealing with popular techniques useful in the improvement of non-clinical reading difficulties found in the content subjects. Planned especially for the subject area teacher and the beginning reading specialist, a study is made of secondary school reading needs, and specific suggestions are outlined for guiding the slow, average, and gifted student to success in reading up to his capacity in a classroom situation. Through an actual study of the more widely used reading workooks, films, slides, tachistoscopic instruments, and texts available in the Reading Laboratory facilities, a practical approach is made to building a repertoire of reading skills in many areas. (Not open to those who have taken Educ. 430 and 557.)

# Education 554. Case Studies of Reading Difficulties: Part I. Testing 2 s.h. Education 555. Case Studies of Reading Difficulties: Part II. Reporting

2 s.h.

These are the basic courses in learning to use diagnostic materials and learning to write up diagnostic findings. In Part I, after making a thorough study of the most frequently used current test instruments and inventories, each teacher applies this knowledge to the actual testing of a child with reading problems. Particular attention is given to the unique values of group and individual tests, survey and diagnostic tests, and standardized and informal tests. In Part II the class learns to interpret test data. Practice in case reporting to parents, schools, and agencies is undertaken. (Educ. 554 not open to those who have taken Eng. 430; Educ. 555 may be taken as Part II after Eng. 430.)

# Education 556. Corrective and Remedial Reading: Part I. Causation 2 s.h. Education 557. Corrective and Remedial Reading: Part II. Treatment 2 s.h.

These are causation and treatment courses planned for the teacher and specialist who are involved in some aspect of remedial instruction in reading improvement. Part I offers an opportunity to extend training by investigation and interpretation of the more serious reading problems. A study is made of the constellation of causes of reading difficulties and techniques of remedial and corrective treatment are projected. In Part II particular attention is paid to the selection and adaptation of suitable improvement devices and curriculum materials. Illustrative cases are drawn from actual clinical experiences by requiring participation in the program of the Reading Laboratory. (Educ. 556 not open to those who have taken Educ. 530A, 558; Educ. 557 not open to those who have taken Educ. 530B and 559.) Prerequisite: Permission is needed to take these courses.

#### Education 560. Advanced Educational Psychology.

2 s.h

The course covers the various aspects of growth. Individual differences, their measurement, and their bearing on educational practices and principles furnish topics of study and discussion. Principles and laws of learning are reviewed. Some time is given to problems of personality as encountered in school work. The several points of view which have been prominent in the psychology of the past fifty to seventy-five years are examined for their contributions to thinking about human nature. Pre-requisite: An introductory course in psychology.

#### Education 561. Child and Adolescent Development

2 s.h.

This course reviews the general characteristics of child and adolescent development: motor and physiological, social, emotional, language, intellectual, and interests and ideals. The influences of home, school, community, and institutional life on child and adolescent development are considered as well as problems of guidance presented by children in the normal course of development and also those presented by deviations from the normal course.

#### Education 562. Principles of Mental Hygiene

2 s.h.

This course is designed to be a general survey of the principles and practices of mental health with special reference to the mental health of teacher and pupil. It involves a thorough grounding in fundamental principles of mental hygiene with much practical consideration of the mental health values of instructional programs and procedures. Discussion centers on practical efforts to develop wholesome personalities in our schools.

# Education 564. Psychology and Education of Exceptional Children: Physical and Mental 2 s.h.

This course surveys current practices and problems in the education of children with physical and mental handicaps, and of gifted children. It is designed for teachers, counselors, supervisors, and administrators who may work with one or more such children or who may wish to prepare for school and community leadership in developing facilities for exceptional children. Prerequisite: A course in child and adolescent psychology.

# Education 565. Psychology and Education of Exceptional Children: Social and Emotional 2 s.h.

This course surveys current practices and problems in the education of socially and emotionally handicapped children. It is designed for teachers, counselors, supervisors,

and administrators who may work with one or more such children or who may wish to prepare for school and community leadership in developing facilities for exceptional children. Prerequisite: A course in child and adolescent psychology.

### Education 566. Psychology and Education of the Gifted 2 s.h

This course is designed to present a complete picture of the bright and gifted young people in contemporary American life. It surveys the various practices involved in their education, as well as the psychological characteristics of this group and socioemotional development. It is designed for teachers, counselors and administrators, and is conducted on an advanced level, allowing sufficient time for seminar discussions in addition to lectures.

# Education 567. Educational and Psychological Measurement in Guidance

2 s.h.

This course deals with fundamentals of educational and psychological measurements in guidance: test theory, statistical concepts, test construction, evaluation, and interpretation. The place of tests in the instructional program is stressed. Prerequisite: This course is open only to those with teaching experience.

#### Education 568. Psychological Tests in Guidance Programs 2 s.h

This course is designed to familiarize the student with various psychological tests and scales that may be used in guidance programs in the secondary school. The student is given practice in administering many types of group tests. This includes scoring the tests and evaluating the results, with a discussion of ways in which these results may be used. Much time is spent in actual laboratory demonstrations of tests, giving students an opportunity to serve as subjects and as examiners. Class discussion is based upon first-hand information gained through use of the tests, on readings, and on class reports. Prerequisite: Educ. 567.

# Education 573. Production of Audio-Visual Instructional Materials: Part I, Non-Projected Materials 2 s.h.

# Education 574. Production of Audio-Visual Instruction Materials: Part II, Projected and Audio Materials 2 s.h.

These two courses combine laboratory and seminar experiences in the organization and preparation of instructional materials for classroom use. They are intended for teachers, administrators, and audio-visual specialists who wish to develop ability to plan and produce audio-visual materials for instructional purposes. Students have opportunities to prepare pictures, slides, transparencies, displays, models, graphs, magnetic tapes, motion picture segments, and instructional television programs according to their interests and needs.

Part I deals with non-projected materials, such as drawings, charts and graphs, bulletin boards, feltboards, maps, demonstrations, exhibits and displays, dioramas, etc.

Part II includes production of projected and audio materials, such as slides, filmstrips, opaques, transparencies, magnetic tapes, motion pictures, television programs, etc.

These courses meet for three clock hours per week, since they involve primarily laboratory experiences. Prerequisite: Educ. 408.

# Education 580. Principles and Techniques of Guidance 2 s.h.

Topics included in this course cover: philosophy of guidance, history of the guidance movement, the need for guidance presented by children and adolescents. The methods of gathering useful data are studied, and school records, exploratory activities, tests, inventories, the case study approach, occupational information, and occupational data are treated as well as general methods of guidance with special stress on interviewing and counseling of students.

## Education 581. Community Resources for Guidance 2 s.h.

This course deals with the various agencies, industries, and institutions available in the surrounding communities for use in guiding students. In addition to becoming familiar with the location and nature of these facilities students learn the techniques for arranging student interviews and visits. Class discussion and personal research are supplemented by field trips. Prerequisite: Educ. 580.

#### Education 582. Vocational Guidance

2 s.h.

This course is intended for counselors in the junior and senior high schools to

obtain information about the principles and philosophy of vocational education and the techniques of counseling youths who wish to receive pre-employment training, and for counselors of out-of-school groups who are attempting to make readjustments to occupational life. Attention is also given to guidance techniques for job preparation and readjustment, the matching of educational and personal abilities to job specifications, the effects of social legislation on the employment of youths, and a study of techniques used in determining occupational needs and occupational changes. Prerequisite: Educ. 580.

#### Education 583. Educational Guidance

2 s.h.

This course is concerned with the facilities available for education after high-school graduation, the problem of further training for pupils leaving school before completing high school, and the academic problems of students while in school. A brief survey of colleges and college-admission procedures is made. Prerequisite: Educ. 580.

#### Education 584. Social-Moral Guidance

2 s.h.

This course is concerned with the non-vocational and non-academic personal and social problems of pupils as well as with the development of techniques by which counselors can integrate the pupil's personal life with the mores and customs of society. It also includes a study of the possible services of various community agencies and a study of the counselor's relation to problems of discipline and citizenship education. Prerequisite: Educ. 580.

#### Education 585. Group Guidance and Counseling Activities

2 s.h.

This course is concerned with the various techniques for helping individual pupils and for using group activities including role-playing as a guidance technique. The group activities considered include those of home rooms, activity periods, occupation courses, student field trips, placement follow-ups, college nights, and career days. Prerequisite: Educ. 580.

#### Education 586. Elementary School Guidance Services

2 s.h.

This course is designed for guidance counselors in the public schools with particular emphasis on the guidance services that may be offered in grades kindergarten through six. The guidance program, as established in the public schools, envisions supervision and administration of the guidance program from the kindergarten through graduation at grade twelve. It is important, therefore, that the guidance director understands the services that can be made available to the elementary school. Prerequisite: Educ. 580.

### Education 587. Administration and Supervision of Guidance Programs 2 s.h.

This course is designed to acquaint the student with more complex aspects of the supervision and administration of a guidance program. It includes such topics as: developing and administering programs of student registration (course selection); theory and techniques of scheduling a modern high school; supervisory responsibilities of the director of guidance within and outside of the department; coordinating guidance activities in a multi-school district, etc. In general, this course is aimed at providing essential background for counselors desiring to establish or administer a guidance program in a high school or a multi-school system.

The primary method of study is the examination and evaluation of current guidance practices leading to the formation of proposals for improvement, and possible inclusion, in guidance programs where the student is working as a counselor and/or a director. Prerequites: Educ. 580 and 6 s.h. in Area 3 of the Personnel and Guidance M.A. program.

# Education 588. Techniques of Interviewing and Counseling 2 s.

This is an advanced techniques course in the counseling of individual students. The directive, non-directive, client-centered, and role playing approaches, as well as the case study methods are studied. Opportunity for demonstration and practice with these techniques are implemented with tape recordings, one way screens, and closed-circuit television. Prerequisites: 12 s.h. of work in the Personnel and Guidance M.A. program and permission of the faculty adviser.

# Education 589. Student Personnel Services in Higher Education 2 s.h

This course is a study of the student personnel functions in two-year and four-year colleges. The areas to be included are: personal counseling, financial aid, dormi-

tory management, health program, student activities and social programs; course selection, job placement, college admission and academic retention, administration and supervision of the program.

#### Education 595A, 595B. Foundations of Education, Part I and II 3 s.h. each

This course is organized in terms of current educational issues and topics of interest. It is designed to provide the student with an understanding of the historical, philosophical, and social backgrounds to which an educational item is related and from which it may have evolved. It includes those elements of educational philosophy, educational sociology, and history of education which may be pertinent to the current problem and which will provide the teacher with the necessary perspective to deal with it in an intelligent manner. The topics included in the course are selected in such a way that a large number of basic concepts will be involved.

This course is organized in two parts, three semester hours each, of which either part may be taken prior to the other or concurrently with it.

(Open to M.A. [major in Teaching] and certification students only.)

# Education 595C. Structure and Organization of American Schools 3 s.h

This course provides a basic orientation in the following areas of professional concern: (1) The organization and role of the public schools in American Society, (2) The responsibility of Federal, State and Local Governments for the education of youth, (3) The nature of teaching as a profession, (4) The evolving role of the school in community improvements, and (5) current school practices.

(Open to M.A. [major in Teaching] and certification students only.)

#### Education 595D. Curriculum and Methods of Instruction 3 s.h

An overview of curriculum is provided. Insight into the role of the teacher in the teaching-learning process is developed. The routine activities and auxiliary responsibilities of the teacher are examined. Student learn about the sources of curriculum materials, and the selection and use of teaching aids. Lesson plans and units of work are prepared for use in the classroom. Through cooperative and/or team teaching, instructors from various college departments assist prospective teachers with specific methods of teaching.

(Open to M.A. [major in Teaching] and certification students only.)

#### Education 595E, 595F. Supervised Teaching Seminar 4 s.h. each

This seminar is provided for in-service teachers employed on an emergency or provisional certificate and is open to students participating in the "approval" certification program or the Master of Arts in Teaching Program. Arrangements are made with the employing Superintendents of Schools for joint supervision of the in-service teacher by local school and College officials. The student will assume full teaching responsibilities and will meet periodically at the College for a complete academic year.

In this seminar students have an opportunity to examine their teaching materials and techniques and to share their experiences with other beginning teachers. Cooperating local school personnel and supervising instructors assist the new teachers with their on-the-job problems.

(Open to M.A. [major in Teaching] and certification students only.)

# Education 595G. "Action Research" for Teachers 3 s.h.

This course is designed to provide teachers with an understanding of the basic principles and techniques of research which are applicable to their classroom situations. Examples of various kinds of classroom research, both of an individual and group nature, are studied and analyzed. Practice is provided in the planning and outlining of specific research projects, the development of experimental designs, and the evaluation of the structure and outcomes of classroom research. Each student develops, in detail, a plan for a research project which he might be interested in undertaking in his own classoom.

(Open to M.A. [major in Teaching] and certification students only.)

# Education 595H. The Teaching of Communication Skills

The role of communication skills is of major importance in the learning process. Every teacher should be aware of the abilities, limitations, and needs of students in this area, the adaptations that must be made in curricula, assignments, and classroom procedures to the levels of the students in a classroom, and the remedial measures that might be taken to improve their status. These communication skills include the specific areas of speaking, listening, reading, and writing. Instructors from the departments of Speech, Reading, and English are involved in this course. The endeavor is made to have the students gain an understanding of the basic principles in each of these fields and their relationship to the teaching of any subject.

(Open to M.A. [major in Teaching] and certification students only.)

#### Education 601. Workshop in Education

2 or 4 s.h.

Section A - Administration

Section B - Supervision

Section C - Curriculum

Section D - Guidance

Section E - Psychology

The workshop course enables the graduate student to devote his time to an educational topic or school problem of current interest to him and to secure the help of the staff, fellow students, and college facilities in pursuing this study. Members of the workshop may meet together to discuss matters of common concern in respect to the current school situation. In addition, the student works independently on his own subject and at times meets with a small group interested in the same area.

In the past, students have worked on topics in such areas as these: problems in administration, guidance programs, extra-curricular activities, school philosophies, problems in supervision, curriculum planning, and community relations. The success of the workshop depends much upon the student knowing what he wants to accomplish; the procedure being flexible enough to support his purposes. He must have his proposed problems for study approved by the Director of the Workshop before he enrolls for the course.

The workshop is divided into five sections, as noted above. The student may enroll for four semester-hours of credit or for two, the four calling for two periods of scheduled time in the course daily, the two calling for one period of scheduled time in the course. The student taking the course for two credits enrolls for one of the five fields. The student taking it for four credits may do all the work in one of these five fields, or he may enroll for two hours of credit in one and two in another.

# Education 602. Research Seminar in Guidance

4 s.h.

This course is designed to provide a laboratory situation for the exploration and study of the present practices with respect to the three major phases of the guidance program. Usually this seminar is given in conjunction with either Vocational (Education 582), Educational (Education 583), or Social-Moral (Education 584) Guidance. The major portion of the time is spent on field trips, in private investigation, and in research. Prerequisites: Educ. 580, 503, and 10 s.h. credit in Areas 2 or 3 of the Personnel and Guidance M.A. program.

#### Education 603. Principles and Practices of Research

2 s.h

This is a second course in the educational research sequence. It is not intended as a substitute for the departmental research seminars, but rather as providing an opportunity for such students who, because of some scheduling difficulty, cannot avail themselves of the departmental course. Admission to this course will require the approval of both the departmental advisor and the chairman of the Education Department. Prerequisite: Educ. 503.

# Education 604. Field Work in Guidance

4 s.h.

The aim of the course is to introduce the student to various aspects of guidance through experience in agencies actually dealing with such problems. Students observe and participate in activities of the agencies to which they are assigned and write full accounts of these observations and experiences. Some time is spent in discussing and evaluating these experiences and relating them to the literature of the subject. Prerequisites are: experience in teaching, familiarity with the literature on all aspects of guidance and mental hygiene, and Education 560, 562, and 580. This work is

conducted by seminar and individual guidance. The hours for the conferences are arranged personally by student and instructor.

#### Education 606. Practicum in Guidance Services

2 or 4 s.h.

This course is designed to be a final summation of the counselor's preparation. It includes: investigation of programs in practice; development of guidance programs to meet specific school needs; evaluation of student personnel services. Prerequisite: Completion of a minimum of 20 s.h. in the Personnel and Guidance program.

# SENIOR-GRADUATE COURSES

Most of the following courses are set up to serve graduate students as well as College seniors. To carry graduate credit, the course in question must be approved by the candidate's advisor.

#### Education 403. Supervised Student Teaching

8 s.h.

Ten weeks of student teaching in the public schools of New Jersey. The purpose of student teaching is to give the student an opportunity to relate theory to practice under skilled supervision; to offer a chance to evaluate his own strengths, weaknesses, and personal and professional needs; and to determine his readiness for responsible membership in the teaching profession.

# Education 404. Cocurricular Activities in the Secondary School 3 s.h.

This course is designed as an introduction to that part of the total school program falling outside of the area of regularly scheduled classes. A study is made of the role of the faculty advisor. The more usual cocurricular activities are considered.

# Educaton 405. Teaching the Block-of-Time Program in the Secondary School

Following a study of the philosophical and psychological bases of the block-of-time program, major emphasis is placed on the methodological problems involved in teaching the program and the development of resource units for use at different levels.

#### Education 406. Educational Sociology

3 s.h.

This course deals with the application of sociological principles to educational problems. The school is treated as a part of the community, and the various social forces that affect the school and its administration are considered. The following topics are included: family backgrounds, community organization, social breakdown, social mobility, socialized classroom methods, and the social approach to individual behavior difficulties.

#### Education 408. Selection and Utilization of Audio-Visual Materials 2 s.h.

Sources, selection, and evaluation of audio-visual aids are studied in this course. Techniques in developing individual reference catalogs of audio-visual aids are stressed. The production of school-made aids is also an important aspect of the course. The use of the latest audio-visual equipment is demonstrated.

#### Education 409. Radio and Sound Equipment in the Classroom 2 s.h

This course trains teachers and school executives in the use of radio programs, amplifying systems, recording equipment, and record players. Actual practice is given in the use of these educational aids. Problems of script-writing, microphone and recording techniques, and program directing are considered. The class visits radio stations for equipment and program observation. Each student develops a teaching unit using radio or sound equipment to vary, vitalize, and improve educational practices.

#### Education 410. Teaching Materials Workshop

2 s.h.

This course is for those persons who wish to study advance problems in the utilization and administration of audio-visual materials. Individual research is stressed, and there is an opportunity to work out individual projects. Such problems as budget requirements, administrative set-up, establishment of film libraries, etc., are emphasized

It is assumed that the student will have taken Educ. 408 or will have had the equivalent in practical experiences.

# Education 440. Camping and Outdoor Education

2 s.h.

The purpose of this course is to familiarize the students with camping and outdoor education as educational methods utilized by the schools of America. The aims and methods of camping are studied, and considertaion is given to the communities that have active camping and outdoor education programs in operation. The course also helps prepare the student for a position in summer camps. This course is usually given at the New Jersey State School of Conservation, Stokes State Forest.

### Education 441. Conservation Education

2 s.h.

This course is designed to give teachers and prospective teachers a background for organizing and teaching conservation on various grade levels. The need for conservation, the various kinds of natural resources, and some of the modern methods for using and renewing these resources are considered. Field trips, laboratory experiences, visual aids, printed materials, and visiting specialists combine to make this a useful introductory course for all teachers.

#### Education 442. Practicum in Camp Leadership

2 s.h.

In this course the student has an opportunity to learn the techniques of camp leadership through practical experience, guided group study, and discussion. The practical experience comes through serving as a camp counselor in an actual camp situation. During this practical experience there are regular discussion sessions and assigned readings which help the student to gain a background of knowledge to help deal with the practical problems as they arise.

# Education 443. Practicum in Camping Education and Administration 3 s.h.

This course is designed to provide practical experience in the identification and solution of problems arising in camp administration. Among the phases considered are discussion of current practices at both private and institutional camps. Interpretation of educational philosophies and objectives as they relate to camping, finances, personnel selection, waterfront organization, food purchasing, staff supervision, sanitation, health and safety, camp management, records and reports, insurance, kitchen management, maintenance, and other phases of camp administration. Practical application is provided through the techniques used in the children's demonstration camp. Prerequisite: Educ. 440 or permission of advisor.

#### Education 444. Practicum in Conservation Education

2 s.h.

This course is designed to provide teachers and supervisors with a background of experience and knowledge which will enable them to organize and to conduct conservation education programs in their own communities. Using an extensive library of conservation educational material, students formulate teaching units, lists of teaching aids, and projects suitable for use in their own communities. Participating in conservation projects with the children in the demonstration camp furnishes a practical background for research and discussion. Prerequisite: Educ. 441, Science 412, Science 413 or the equivalent.

#### Education 450. Psychological Foundations of Personality

3 s.h.

This course is concerned with the physical, mental, and cultural factors influencing personality development. Such topics as the nature of personality, mental health and patterns of deviation, and evaluation, are considered.

# Education 451. Guidance for the Classroom Teacher

3 s.h.

This course is designed as an introduction to the field of guidance for teachers who are concerned with problems of guidance and human relations in the classroom. This course is also designed to give the new teacher a picture of the place of guidance in the modern school, to indicate what guidance is and what is not, to indicate the techniques by which guidance is accomplished, and to identify some of the tools of the guidance counselor.

# Education 452. Psychology and Education of the Handicapped

3 s.h.

This course is for the preparation of teachers of handicapped children and youth. It orients prospective teachers of regular classes to the special needs of those with handi-

caps of sensory, motor, intellectual, emotional, and neurological origins. Both the theoretical psychological aspects and the practical applications to the classroom are studied. The course includes analysis of case material.

#### Education 453. Social Psychology

3 s.h.

This course focuses on the social behavior of the individual and the group. Attention is given to social perception, motivation, and learning; attitudes and values; the development and dynamics of social groups; intergroup tension and prejudice; and psychological approaches to public issues.

#### Education 461. The Junior High School Curriculum

3 s.h.

Recent trends in the development of the junior high school curriculum and the relation of the curriculum to the aims, function, and organization of the junior high school are covered. Curriculum patterns in representative junior high schools are studied and evaluated. An opportunity is given to each student to develop units of work for junior high school subjects in the major of his choice.

# Education 462. Survey of Reading Methods in Secondary School Subjects 3 s.h.

Planned especially for the inexperienced teacher in all subject matter areas, this introductory course outlines the role good reading plays in achieving both academic and personal success in every aspect of school life. New teachers will want an overview of: the physiologial, psychological, and sociological factors in reading; resources available to the reading-minded teacher; and the school's responsibility for helping the student build an inventory of reading skills by utilizing reading opportunities in the entire curriculum.

# Education 463. Reading and the Improvement of Study Skills 3 s.h.

This a course in "How to Study" designed to prepare teachers to help junior-senior

high school students to achieve greater effectiveness in their reading-study habits. After examination of recent materials and research, the class develops a series of practical methods for teaching and learning: the SQ3R approach, the best methods for taking examinations, the application of reading to problem solving, the development of memory and concentration, and the various techniques for taking and organizing reading notes, and the reading of homework assignments. (Not open to those who have taken Educ. 530C.)

#### Education 464. Foundations of Reading Instruction

Good first reading is of primary importance in the sequential development of reading skills which extend into the junior and senior high school. In this course methods and materials currently in use in elementary reading programs are studied with a view toward increasing the power of both the teacher and the learner. How the reading process begins, and how it is reinforced are topics fundamental to all upper grade teachers who are faced with the problem of continuing reading skills development in all curriculum areas. (Not open to those who have taken Educ. 532.)

#### Education 465. College Reading and Study Improvement Laboratory 3 s.h.

This workshop course is designed for those college students who feel that reading-study problems are interfering with their normal school progress. Students engage in supervised practice experiences which promote vocabulary growth, more flexible reading speeds, comprehension and recall improvement, skimming competency, and better interpretative and critical reading techniques. Particular attention is given to reviewing for examinations, keeping up with daily reading assignments, taking notes, and organizing the reading content into main and sub-topic structure. Students may volunteer for this course or be recommended by a faculty member.

#### Education 491. Measurement and Evaluation in Teaching and Learning 3 s.h.

This introductory course deals with teacher-made tests, standardized tests, and other devices for measuring and evaluating achievement, intelligence, aptitudes, social relationships, and personal-social adjustment. Instruction and practice are given in diagnosing disabilities in subject-matter areas and in appraising, marking, and reporting

pupil progress. The student constructs, uses, and evaluates teacher-made tests, selects and administers standardized tests, handles test scores, and interprets test data.

#### Education 492. Comparative Education

3 s.h.

The educational systems of Europe, Asia, Africa, and Latin America are studied in an attempt to gain insight into the essential qualities of American education. In this process the relationship between the educational system of each culture and its history, economy, and political and social organization should emerge. Factors causing progress and change in education since 1900 are observed.

#### Education 493. Recent Trends in European Education

6 s.h.

This is a field-study course covering a period of approximately six weeks of seminars and of observation and visitation to school systems in Western Europe. Present educational policies and practices in selected European countries are studied with particular reference to economic, political, and social forces shaping their cultures. Similarities and contrasts among European and the American educational systems are analyzd.

#### DEPARTMENT OF ENGLISH

Graduate Advisor: DR. HAROLD C. BOHN

Graduate study in the Department of English is designed:

- 1. To broaden the understanding and appreciation of the culture of the Western World through extended study of the literature of Great Britain and the United States, of those European nations which have contributed much to our American heritage, and of those Oriental and other nations now exerting an increasing influence upon the modern world.
- 2. To examine the function of English language communication in the modern world through study of its historical development, its psychological nature, its critical expression, and its practice in the language arts.
- 3. To enrich the professional background of English teachers through investigation of research and experimentation designed to improve instruction in English in the secondary school.

# \*REQUIREMENTS FOR THE M.A. DEGREE IN ENGLISH

The candidate for the Master's degree must present an undergraduate major of at least twenty-four semester hours in English with an accumulative average in all English courses of B or complete the required number with prerequisite courses prescribed by the Graduate Advisor for the English Department before matriculation.

Upon matriculation each candidate receives from the Graduate Advisor for the English Department an approved course outline.

- I. General Education (see Master's Degree Program Patterns) 6-12 s.h.
- II. Basic Professional Education (see Master's Degree Program Patterns) 6-9 s.h.
- III. Specialization 11-20 s.h.
  A. American Literature 3-6 s.h.

From the following courses: Eng. 525, 529, 533, 537, 538, 543, 546A, 546B, 546C, 546D, 406, 407, 413, 421, 443.

B. English Literature 4-6 s.h.
From the following courses: Eng. 501, 502, 503, 504, 506, 508, 509,

From the following courses: Eng. 501, 502, 503, 504, 506, 508, 509, 510, 518, 521, 524, 531, 532, 535, 540, 544A, 544B, 544C, 402, 404, 407, 413, 421, 443.

- C. World Literature 2-4 s.h. From the following courses: Eng. 500, 511, 513, 514, 520A, 520B, 522, 526, 527, 528, 530, 534, 536, 539, 548, 421, 428, 432, 451, 452, 477.
- D. Language and Communication 2-4 s.h. From the following courses: Eng. 507, 512, 516, 517, 523, 541, 419,

428.

In addition to or in lien of English courses in Language, courses in Speech

In addition to or in lien of English courses in Language, courses in Speech (Speech: 550, 565, 410, 435, 448, 449, 456, 461B, 461B, 462, 466, 468) and/or courses in Reading Educ.: 550, 551, 552, 553) are acceptable, especially if the candidate wishes to augment his skill as teacher of Speech or Reading along with his English teaching.

E. English Research Writing

2 s.h.

English 603 is required of all candidates for the degree. The subject of the research will determine the area of specialization (American Literature, English Literature, World Literature, Language and Communication) to which this course is assigned for credit.

#### IV. Comprehensive Examination

To receive the degree of Master of Arts in English, cach candidate must pass a written comprehensive examination in April before the granting of the degree at the June Commencement or the Fall Convocation.

<sup>\*</sup>Pending approval State Department of Education.

This examination is designed to test the candidate's mastery of the History of Literature, the techniques of literary expression, technical matters of writing, and Linguistics. He will also be expected to have a knowledge of the professional skills needed to teach these various aspects of English.

This mastery is partly obtained from the courses taken leading to the degree; largely, however, the candidate must assume the responsibility of preparing himself independent of courses. He is expected to keep informed about current literary and teaching items of importance.

Sufficient choice is provided so that each candidate should be able to find a sufficient number of questions related to his complement of courses to meet the required number of answers.

Each candidate who has declared to the Graduate Office his readiness to take the examination, given only once a year in the Spring Semester, will be notified of date, time and place.

# GRADUATE COURSES

#### Eng. 500. Greek Classical Drama

2 s.h.

Minimum: 32 s.h.

All of the extant plays of Aeschylus, Sophocles, Euripides, and Aristophanes are studied in detail. Attention is devoted to usage of Greek mythological material, to dramatic structure, and to the philosophy of each author.

#### Eng. 501. Anglo-Saxon

2 s.h.

Both the literature and the language of the Anglo-Saxon era are stressed. Specimens of alliterative poetry, including excerpts from Beowulf and of religious prose and The Anglo-Saxon Chronicle are read as literary art and as milestones in the history of English writing. Structure and vocabulary are investigated as the pedestals upon which rests the edifice of modern English.

#### Eng. 502. Victorian Poetry

2 s.h.

The most important English poets who wrote during the transition from the Victorian to the modern period are read, analyzed, and discussed: Rossetti, Swinburne, Hardy, Bridges, G. M. Hopkins, Frances Thompson, A. E. Housman, Kipling, and Yeats.

#### Eng. 503. Geoffrey Chaucer and His Times

2 e h

Some of the works of Chaucer are studied intensively, while others are read rapidly, so that the student may acquire a broad general understanding of Chaucer's place in the history of English literature as well as facility in reading and interpreting the medieval text.

#### Eng. 504. Elizabethan and Jacobean Dramatists

2 s.h.

This course deals with the men who inspired and rivaled Shakespeare. Marlowe, Dekker, Chapman, Jonson, Beaumont and Fletcher, Webster, and Ford are read for their own sakes and for the light they throw upon Shakespeare.

#### Eng. 506. John Milton

2 s.h.

The understanding and evaluation of Milton's poems are primary aims. Contributory are the following: Milton's literary heritage and influence, his position of leadership in the Puritan struggle for civil and religious liberty as revealed in his prose writings, and biographical materials.

#### Eng. 507. Critical Writing

2 s.h.

This course is primarily an examination of critical articles relating to major literary figures. Besides reacting to these examples of literary opinion and scholarship, students are asked to develop a consistent set of critical principles and to apply these to the work of some outstanding author.

# Eng. 508. English Renaissance Non-Dramatic Poetry

2 s.h.

Poetry from Skelton through the Metaphysical poets is studied. Attention is given to sonnet sequences, broadside ballads, miscellanies, and prosody.

Eng. 509. English Prose Writers of the Nineteenth Century

2 s.h.

Influential prose writers of the nineteenth century, such as Carlyle, Macaulay, Ruskin, and Arnold are examined in detail. Their effect on the intellectual temper of the century is emphasized.

#### Eng. 510. Samuel Taylor Coleridge

2 s.h.

Since Coleridge reflects all the cultural currents of the Romantic era, this course approaches the aesthetic and intellectual life of that age through the poems, essays, lectures, philosophical writings, and letters of Coleridge. It also considers portions of the vast body of Coleridge scholarship.

### Eng. 511. The History of Literary Criticism

2 .sh.

Great critics from Aristotle to I. A. Richards and T. E. Eliot are reviewed. Four major critical orientations are explored to bring modern criticism into focus.

# Eng. 512. The Growth and Structure of the English Language 2 s.l

Concerned with the historical background necessary for an understanding of the English language as it is spoken and written today, the course emphasizes the following areas of study: the nature and origin of language; the ancestry of English; the early growth of English; sources of the vocabulary and the making of words; changing meanings and values of words; syntax and usage; concern with dictionaries, spelling, pronunciation, variations, and standards in the modern period.

#### Eng. 513. The Renaissance

2 s.h.

This course deals with Petrarch and the Humanists; Boccaccio and the Novelle; Machiavelli and The Prince; Cellini and the Autobiography; Castiglione and The Courtier; Boiardo, Pulci, Ariosto, and the romantic epic; the drama; Rabelais and Gargantua and Pantagruel; Ronsard and the French Pleiade; Cervantes and Don Quixote; the art of DaVinci, Botticelli, Michelangelo, Raphael, Titian, and others; and the House of the Medici, Savonarola, the Popes.

#### Eng. 514. Origin and Development of the Arthurian Legend

2 s.h.

This course deals with the vague and tentative beginnings of the Arthur story in early chronicle legend; with Geoffrey of Monmouth's pseudo-historical and Chretien de Troye's romantic treatments; with the great medieval recapitulations of Gottfried von Strassburg, Wolfram von Eschenbach, and Sir Thomas Malory; with the Victorian retellings of Tennyson, Arnold, and Morris; with the musical adaptations of Wagner; and with the modern versions of E. A. Robinson. It includes a detailed history of the development of the legend in its diverse forms.

#### Eng. 516. Language Problems in the English Curriculum

2 s.ł

The purpose of this course is to enrich the student's sensitivity to an understanding of language. Theories of language and the cultural histories of words are reviewed and applied to the problems of reading, composition, and speech. The course is conducted as a seminar.

#### Eng. 517. Recent Research and Experiment in the Teaching of English. 2 s.h.

Recent experiments in methods of teaching English, and current research in the fields of language, literature, and composition are examined and evaluated. The purpose of this examination is to throw light on problems of teaching English in the secondary school, and to indicate the helpfulness of trends and developments.

#### Eng. 518. The Major Romantic Poets

2 s.h

The poems of Wordsworth, Coleridge, Byron, Shelley, and Keats are emphasized. Pre-Romantics—Blake, Burns, and Scott—and minor Romantics are considered. Poetic theory as enunciated by the poets themselves is studied.

# Eng. 520A and 520B. Great Books on Education

2 s.h. each

Students examine the classics dealing with educational theory and practice which they so often read about but rarely consult.

Part A deals with Plato's Republic, Xenophon's Cyropaedia, Cicero's De Oratore, Castiglione's The Courtier, Machiavelli's Prince, Rabelais's Abbey of Theleme, Ascham's Schoolmaster, Bacon's Novum Organum, Defoe's Projects, Milton To Samuel Hartlit on Education.

Part B deals with Rousseau's Emile, Byron's Don Juan, Hughes' Tom Brown's

Schooldays, Newman's Idea of a University, the Arnold-Huxley debates, and the works of John Dewey and Jacques Barzun.

This course is recommended for graduate students in the Department of Education.

#### Eng. 521. English Literature of Social Problems

s.h

Social problems implicit in all literature are considered. Special emphasis is placed on authors who were keenly aware of the social implications of their work. Langland, Chaucer, Shakespeare, Jonson, Milton, Swift, Fielding, Smollett, Dickens, Carlyle, Galsworthy, Wells, and Shaw are among the writers read and discussed.

#### Eng. 522. Contemporary European Literature

2 s.h.

"Contemporary" is here defined as the period from the end of World War I to 1960. The great writers on the Continent, of this period—Gide, Proust, Mann, Kafka, with others—will be read extensively, and discussed intensively.

#### Eng. 524. Contemporary British Literature

2 s.h.

Important British literary contributions since 1945 are studied, as they reflect recent history, trends and philosophies. Included are writers such as C. P. Snow, Joyce Cary, George Orwell, William Golding, and Iris Murdoch.

### Eng. 525. The Development of the American Novel

2 s.h.

The American novel from 1789 to the present is examined. Beginning with the novels of the early Nineteenth Century, the course traces the rise and development of the Romantic and Realistic novel and concludes with an example of American Naturalism. Written criticism of five novels is required.

#### Eng. 526. Theory of the Novel as a Literary Form

2 s.h.

Henry James said: "The novel is the most prodigious of literary forms." Yet only beginning with himself, about 1880, did a systematic treatment of the origin, development, and craft of the novel begin to appear. Criticism today is doing for the novel what Aristotle's Poetics did for Greek tragic drama, and what Coleridge and Wordsworth did for modern poetry. Prerequisite: A course in the History of the Novel.

#### Eng. 527. The Major Philosophies of Life

2 s.h.

Man's cultural evolution reveals six or seven basic philosophies of reality and life. Illuminating correlations between individual temperments, cultural epochs, and styles of living, will be shown. Designed to stimulate the student to apply discussions and readings to his own life and culture.

#### Eng. 528. New Perspectives in World Literature

2 s.h.

Literatures of the Orient, the Middle East, Africa, and South America are read and interpreted in relating to Western World Literature to create a world perspective through understanding of the interrelations of literature.

### Eng. 529. The Development of American Poetry

2 s.h.

A survey is made of the complete sweep of American poetry from the earliest times to the present. Attention will be given to all major patterns, movements, and other literary developments.

# Eng. 530. Dante and His Influence in England and America

2 s.F

Fully two-thirds of this course is devoted to rereading and reassessment of Dante in English translation. When Dante's meaning has been revealed, his continued influence from Chaucer through Sackville, Spenser, and Milton to Rosetti, Longfellow, and T. S. Eliot becomes the subject of investigation.

# Eng. 531. Seventeen Century English Literature

2 s.h.

The style and content of such prose writers as Bacon, Burton, Walton, Hobbes, Bunyan, Pepys, and Dryden are investigated. Similarly, the poetic expression of experience in Donne, Jonson, Herbert, Herrick, Cowley, Vaughan, Suckling, Lovelace, Waller, and others is studied.

# Eng. 532. The Victorian Novel

2 s.h.

The novel of Victorian English is studied intensively. A review of the development

of the English novel before this period is followed by studies in the works of Dickens, Thackeray, Eliot, Trollope, Mercdith, and Hardy. Special attention will be given to novels suitable for high school study.

### Eng. 533. Masters of American Literature

2 s.h

Significant American writers, such as Bryant, Emerson, Franklin, Howells, Irving, Melville, Poe, Twain, and Whitman, are studied to discover their contributions to American life and to reveal important forces in our national background.

# Eng. 534. Medieval Epic, Saga, and Romance

2 s.h.

The chief medieval epics, sagas, and romances translated into modern English from the literatures of England, France, Germany, Ireland, Iceland, Wales, and Italy are reviewed. Attention is given both to those narratives which reflect the life of a particular country and to those which are international and express more generally the spirit of medieval Europe.

# Eng. 535. Eighteenth Century English Literature

2 s.h.

Major essayists, poets, dramatists, novelists, and letter writers are read and evaluated in terms of the thought, life, and literary movements of their own time and in terms of their significance for the present generation. Authors studied include Addison, Steele, Defoe, Swift, Goldsmith, Sheridan, Gray, Johnson, Boswell, Cowper, Richardson, Fielding, Sterne, Smollett, and Gibbon.

#### Eng. 536. Philosophy in Great Literature

2 s.h.

The study of a few masters of literature, such as Dostoievski, Tolstoy, Mann, Proust, aims at giving the student a deeper insight into the life-views and world-views which have shaped the consciousness of modern Western man.

#### Eng. 537. American Drama in American Democracy

2 s.h.

Plays produced on the American stage from Colonial to contemporary times are read and studied to illustrate the development of democratic concepts.

# Eng. 538. American Literature of Social Problems

2 s.h.

American literature reflecting social problems from 1800 to 1914 is surveyed to discover the attitudes of various authors toward these problems. Such authors as Cooper, Lowell, Thoreau, Whitman, Howells, Bellamy, Garland, and Glasgow are studied from this point of view.

# Eng. 539. Theater and Society

2 s.h.

Dramatic expression from ancient Greece to the present is studied to observe and appreciate social, political, and ethical trends reflected in the drama. Social trends in contemporary drama receive special attention.

#### Eng. 540. T. S. Eliot

2 s.h.

All of the works of Eliot— poems, plays and critical essays—will be read. A survey will be made of his influences on his immediate circle, on the poets and critics of the Nashville Group, and on the New Criticism. The reasons for his dominating position in the world of English and American letters during forty-odd years will be assessed.

#### Eng. 541. The New Grammar

2 s.l

New grammatical theories are introduced. The most essential details of structural and generative grammar are contrasted with traditional syntax. The relationship between a knowledge of grammar and the ability to write is evaluated in terms of teaching methods.

#### Eng. 543. Contemporary American Literature

2 s.h

Major authors and literary movements in contemporary America are studied. Writers of prose, poetry, and drama are included.

#### Eng. 544A, 544B, 544C. Shakespeare

s.h. each

Part A deals with the tragedies. Shakespeare's development as a writer of tragedy, his concept of the tragic, and the diversity of characters who embody this concept

are studied in the light of critical traditions and the history of Shakespearean stage production.

Part B deals with the comedies. Shakespeare's development as a writer of comedy, his masterful understanding of the large function of comedy, and the variety of situations and characters exhibiting this function are critically studied.

Part C deals with the English chronicle plays and with Roman plays. Shakespeare's use of history in these plays is considered first as history and then as history presented dramatically and poetically.

# Eng. 546A, 546B, 546C, 546D. Giants in American Literature: Hawthorne, Henry James, O'Neill, Faulkner 2 s.h. each

A careful comprehensive study will be made of one of these giants of American Literature. Emphasis will be placed, not only on the significance of his individual works, but also on his influence on American thought and literary patterns. Each of these authors will be considered for an entire course.

#### Eng. 548. Fiction as an Image of World History

2 s.h.

A sequence of historical and cultural novels is presented to give insight into the epochs involved. Great historical novels pertaining to Hebrew, Egyptian, Greek, Roman, Medieval, Renaissance, and modern times are discussed.

### Eng. 603. English Research Writing

2 s.h.

This seminar course is designed primarily to provide an opportunity for graduate students in English to investigate and apply the techniques of research in the English field. Prerequisite: Educ. 503.

# SENIOR-GRADUATE COURSES

# Eng. 402. Survey of British Literature to 1798

2 s.h.

All forms of British literature, except drama and fiction, from the beginnings to the triumph of romanticism in 1798, are systematically surveyed. Chronology, development, and the transmission of influences and traditions through the centuries are studied.

#### Eng. 404. Survey of British Literature

2 s.h.

British literature from 1798 to the present is surveyed. Prerequisite: Eng. 402.

#### Eng. 406. The Modern Novel

2 s.h.

British and American novels of the twentieth century are reviewed. Critical attention is directed toward political, social, and literary values in selected novels. Students are taught how to read a novel with profit, and how to direct the reading of others.

# Eng. 407. Biography: Its Form and Function

2 s.h.

Selected biographical writings, including autobiography, diary, and memoirs, from medieval England to contemporary American Pulitzer Prize biographies, are examined. Study emphasizes both changing concepts of the form and also revelations of the nature, character, and varied destinies of human personality.

# Eng. 408. Advanced Creative Writing

2 s.h.

The nature of the creative process in the arts in general is studied as it relates to creative writing. Through work on an extensive creative writing project, the student's creative writing ability is further developed. Methods of teaching creative writing are studied. Prerequisite: Eng. 104, or equivalent.

### Eng. 413. Modern Poetry

2 s.h.

The distinctive poetry movements that have occurred during the present century are examined as expressions of changing social and artistic ideals. Critical appreciation is developed through comparison of diverse styles, themes, and poetic theories.

#### Eng. 419. Theories and Teaching of Grammar

2 s.h.

Both the traditional and the new approaches to the study and teaching of English grammar are studied. Relationships between grammatical rules and usage are examined to define the limits of grammar. The practical approach of structural linguistics to the problems of grammar in writing is discussed.

#### Eng. 421. The Short Story

2 s.h.

An analysis is made of the short story as an evolving literary form, emphasizing the productions of the Nineteenth and Twentieth Centuries. Stories are analyzed for both human and literary values.

# Eng. 428. The Film and Society

2 s.h.

The film is studied and evaluated as an art form, an educational device, a social force, and an entertainment medium. The history of motion pictures, film techniques, and the scenario as a literary type are examined. Numerous films are shown, analyzed and discussed.

#### Eng. 432. The Development of the Drama

2 s.h.

Drama is studied in all periods from ancient Greece and Rome through the Middle Ages and the Renaissance to the beginning of modern drama with Ibsen. Major characteristics of the drama and its necessary complement, the theater, are emphasized.

#### Eng. 443. Modern Drama

2 s.h.

Trends, developments, and accomplishments from 1915 to the present in the United States and Europe provide the background of this course. Examination of structure, content, and production of plays creates critical insight and appreciation. Wide reading and theatergoing are encouraged.

#### Eng. 451. Literature and Art in Western Culture

2 s.h.

Art provides an understanding among people throughout the world. By examining the relationship between art and literature, and seeing that re-creation of experience is a function common to both, the student learns how literature provides understanding.

#### Eng. 452. Five Great Books

2 s.h.

Five books which have profoundly influenced the development of civilization are studied in depth.

### Eng. 477. Introduction to Philosophy

2 s.h.

A systematic inquiry is made into the nature, scope, methods, basic problems, and major types of philosophy.

The following courses are acceptable for non-English majors as general education electives: Eng. 520A, 520B, 521, 522, 524, 527, 528, 529, 533, 537, 538, 539, 543, 548, 402, 404, 406, 407, 408, 413, 421, 428, 432, 443, 451, 452, 477.

# DEPARTMENT OF FINE ARTS

Graduate Advisor: DR. LILLIAN A. CALCIA

The graduate program in Fine Arts leading to the Master of Arts degree is intended:

- a. to offer to Fine Arts teachers in the New Jersey public schools an opportunity to gain further professional preparation for the improvement of their teaching skills.
- b. to provide an opportunity for students to extend, intensify, and enrich their undergraduate program of general education in order that they may become better informed and more responsible citizens of a changing society.
- to assist students to acquire a more advanced and comprehensive grasp of the major problems, issues and techniques of professional education.
- d. to provide an opportunity for students to extend their knowledge and experience in their field of specialization.
- e. to encourage the spirit of scientific inquiry and creative, original, and independent thought by providing training and experience in educational research.
- f. to provide experience designed to develop in students desirable personal and social qualities of democratic citizenship.
- g. to encourage the teacher to gain the requisite status for professional advancement.

### Admission Requirements and Screening Procedures:

- a. The requirements established for all graduate studies and for matriculation at the College will be followed in respect to this program.
- b. Matriculation normally requires prior completion of the basic courses in art educaton needed for New Jersey certification to teach art in the secondary schools (grades 7-12) or in the elementary and secondary schools (grades K-12).
- c. Special provision is made in this program to matriculate certified elementary teachers who have an interest and ability in art, and who wish to improve their art background. This is a very rewarding program for some elementary teachers, but students are cautioned that this M.A. program will not automatically certify elementary teachers as art teachers since this special area certificate requires additional course work (24 s.h. for secondary certification and 40 s.h. for elementary-secondary certification).

# REQUIREMENTS FOR THE M.A. DEGREE IN FINE ARTS

I. General Education (see Master's Degree Program Patterns) 6-12 s.h.
II. Basic Professional Education (see Master's Degree Program Patterns) 6-9 s.h.
III. Specialization Courses 11-20 s.h.
F.A. 603. Seminar in Art Education2 s.h.  Required of all candidates (except students who elect Grad. 600 Master's Thesis).
Prerequisite: Educ. 503.
The following courses will be elected by students subject to approval of the Graduate Adviser:  9-18 s.h.
1. Art Education
F.A. 501. Readings in Art Education 2 s.h. F.A. 502. Curriculum Construction in Art Education 2 s.h. F.A. 603. Seminar in Art Education 2 s.h.
2. Art History and Philosophy
F.A. 490. Art of the Nineteenth Century 2 s.h. F.A. 491. Art of the Twentieth Century 2 s.h. F.A. 505A, 505B. Selected Problems in Art History 2 s.h. each F.A. 620. Field Course in Art 2-6 s.h.
3. Fine Arts
F.A. 440. Home Design and Community Planning 2 s.h. F.A. 445. Life Drawing 2 s.h. F.A. 460A, 460B, 460C, 460D. A Contemporary Art Form (Photography) F.A. 511A, 511B, 511C, 511D. Painting 2 s.h. each F.A. 521A, 521B, 521C, 521D. Sculpture 2 s.h. each

	F.A. 525A, 525B. Metalwork and Jewelry F.A. 531A, 531B, 531C, 531D. Ceramics F.A. 541A, 541B. Weaving F.A. 543A, 543B. Decoration of Fabrics F.A. 550. Silk Screen Printing F.A. 551. Intaglio Printing F.A. 552. Woodcut Printing F.A. 553. Lithography	2 s.h. each 2 s.h. each 2 s.h. each 2 s.h. 2 s.h. 2 s.h. 2 s.h. 2 s.h.
	F.A. 556. Lettering	2 s.h.
		2 s.h. each
4.	Individual Study and Thesis	
	Grad. 600. Master's Thesis	

## **GRADUATE COURSES**

# Fine Arts 501. Readings in Art Education

2 s.h.

This course is a study of the literature of the foundations of art education. Readings will be selected from philosophy, the social and behavioral sciences, and the history of art education. The implications of the developments in science and technology will be studied.

#### Fine Arts 502. Curriculum Construction in Art Education

2 s.r

This course is planned for students with interest in curriculum construction or revision and includes both the elementary and secondary programs. A study of curricular materials in use in New Jersey and selected materials in use throughout the country will be made. Evaluation of these materials will be made in terms of principles of curriculum construction.

#### Fine Arts 505A, 505B. Selected Problems in Art History

2 s.h

This is a seminar course dealing with selected art problems of historic, social, and philosophical nature. Some of the following topics are chosen for a detailed examination: the human figure in the history of art, the rise of landscape painting, Impressionism in the East and West, historical views of art criticism, the self-portrait, Romanticism and Realism, art and society, on Modern Art, art and the sciences, and the rise of "Isms", Methods for dealing with selected topics include lectures, readings, reports, and discussion.

### Fine Arts 511A, 511B, 511C, 511D. Painting

2 s.h. each

Studio in painting is designed to further the creative impression and technical knowledge of the student in various painting media. Emphasis will be upon personal and professional development through studio work, trips, and the study of the work of contemporary artists.

#### Fine Arts 521A, 521B, 521C, 521D. Sculpture

2 s.h. each

In these courses the student is expected to explore independently one or two materials and techniques and to begin to find his own directions as a sculptor.

#### Fine Arts 525A, 525B. Metalwork and Jewelry

2 s.h. each

Experiences in this sequence involve the designing of jewelry and small sculpture in varied metals and employing the techniques of flat sheet metal and casting.

# Fine Arts 531A, 531B, 531C, 531D. Ceramics

2 s.h.

Pottery and ceramic sculpture are included as forms of ceramic art. Instruction in basic aspects of forming, decorating, glazing and firing will be covered. Beyond this the work will be determined on an individual basis.

#### Fine Arts 541A, 541B. Weaving

2 s.h. each

Primary emphasis in this experience is on designing with simple and four harness table and floor looms in a variety of techniques and materials.

### Fine Arts 543A, 543B. Decoration of Fabrics

2 s.h. each

In this area major emphasis is on designing of the fabric through block printing, silk screen printing, stitchery, hooking, applique, and dyeing techniques.

#### Fine Arts 550. Silk Screen Printing

s.h.

This course affords an opportunity to study and practice the graphic art techniques of silk screen from the creation of the master design through the construction of necessary printing facilities and printing. Experiences will include the use of tusche, glue, stencil lacquer, and photographic techniques.

#### Fine Arts 551. Intaglio Printing

2 s.h.

This course is designed to enable the graduate student to acquire additional competency and depth of experience in etching, dry point, aqutint, and soft ground. Stress is on critical evaluation of design integrated with printing techniques.

#### Fine Arts 552. Woodcut Printing

2 s.h.

This course explores the fine art of the woodcut, and its relation to painting in color, size and richness. The cutting of various woods and veneers is fully demonstrated. Different approaches of printing and inventiveness in using other materials in relation to wood are fully explored. The course includes lectures on prints of the past and field trips to important print exhibitions.

#### Fine Arts 553. Lithography

2 s.h.

This course is designed to provide opportunity for the student to acquire competency in the art of lithography. All steps from design and execution of master drawing to the finished print are covered. Studio experiences provide the student with first hand knowledge of tools, materials and techniques of the lithographic process. Adaptation of the lithographic phase of print-making to classroom use is also studied.

#### Fine Arts 556. Lettering

2 s.h.

This course provides a study of styles and techniques of lettering applied in such forms as manuscripts, signs, posters, display, and advertising layout. A brief introduction to typography is offered in the course.

#### Fine Arts 557. Graphic Design

2 s.h.

This course is concerned with the techniques and principles of design of printed matter and displays. Design projects involve elements of layout, illustration, typography, printing processes and preparation of copy for the printer.

### Graduate 600. Master's Thesis

4 s.h.

#### Fine Arts 603. Seminar in Art Education

2 s.h.

This course is designed primarily to afford the graduate student an opportunity to make an extensive study in the field of art education and in the related fields of psychology, and child growth and development. Prerequisite: Educ. 503.

# Fine Arts 611, 612. Individual Study

2 s.h. each

Under this course designation, advanced students may extend their experience beyond the regular course offering in a chosen field or medium, to a maximum of 12 hours in the particular medium. Direction, conduct and evaluation of the work are developed in consultation with the instructor. As a basis for admission and planning, each student will present a representative selection of his prior work in the chosen medium.

# Fine Arts 620. Field Course in Art

2-6 s.h

Travel courses to art sources in the United States and foreign countries will be accepted for graduate credit not to exceed 6 points. A general catalog description of these courses follows. Content and requirements will be set up as the courses evolve.

This course provides the opportunity to have a first-hand contact with the historic art forms of the places visited and to see contemporary artists and craftsmen in the process of creating art forms. Each student will select an area of study in which the places visited have rich art resources. As preparation for the course the student will outline his chosen study problem, read background material, and list sources he expects to utilize.

# SENIOR-GRADUATE COURSES

# Fine Arts 415. Designing in Native Materials

2 s.h.

In this course the student gains an appreciation and understanding of art expression growing out of the immediate environment as he works creatively with native materials. A new respect for the potentials of raw earth products is discovered through art experiences in keeping with good conservation practices. Flower and plant arrangements for room and table decorations are studied. Digging for clay, hunting for wood, seeds, grasses, and experimenting with dyes becomes an exciting adventure.

#### Fine Arts 440. Home Design and Community Planning

2 s.h

The design of the home and the community for the full utilization of the knowledge and the resources of industry, engineering, science and art is the content of this course. Work of leading architects and city planners is explored as it fits into the solution of the problems of interest to the student and as a reflection of our contemporary cultural patterns. Trips to sources for home furnishings, model homes, well-planned communities are included in the course activities.

#### Fine Arts 445. Life Drawing

2 s.h.

This is a course in the study of the structure and proportions of the human form with emphasis on expressiveness of drawing.

# Fine Arts 460A, 460B, 460C, 460D. Photography: A Contemporary Art Form 2 s.h. each

The course emphasizes the role of the photographer as artist. Knowledge and skills of the craft of photography are developed within the context of the significant expression of ideas. This advanced course assumes knowledge of fundamental techniques.

#### Fine Arts 474. Arts and Crafts in Education

2 s.h.

Included in this course are workshop activities in the arts and crafts of the elementary and secondary school program. Painting, drawing, modeling, pottery, weaving, paper-mache, paper structure, school display techniques, lettering, wood, leather, plastics, metal work, and puppetry are materials and processes which are explored.

# Fine Arts 490. Art of the Nineteenth Century

2 s.h.

This course explores the major art movements of the Nineteenth Century in terms of the rapid changes of social, political, and artistic personalities. The rise of Classicism, Romanticism, and Realism; the salon at mid-century; the Impressionists and post-Impressionists are discussed as well. The work of this period is studied through illustrated lectures, museum trips, readings, and discussion. This course is planned for all majors.

### Fine Arts 491. Art of the Twentieth Century

2 s.h.

This is a course designed to survey through the use of visual materials such as slides, art films, and reproductions, and through discussion and studio participation, the major influences and trends in the development of painting, sculpture and architecture of the Twentieth Century.

# DEPARTMENT OF FOREIGN LANGUAGES

Graduate Advisor: MR. LOUIS M. ROEDERER

It is expected that all candidates for the Master of Arts degree will take French 505 or Spanish 505 and at least one of the two listed foundation courses, unless similar courses were already taken at the undergraduate level.

A candidate for the Master of Arts degree may elect to write a thesis in lieu of four of the thirty-two semester hours of credit necessary for the degree. Plans for the thesis should be approved by the Department Chairman no later than one year prior to the anticipated date of graduation and the work must be completed no later than four months before such anticipated date. It will be the responsibility of the student to observe these time limits.

All candidates for the Master of Arts degree in Foreign Language must pass a comprehensive examination in April for candidates anticipating graduation in June or in September.

General standards for matriculation will be as set forth in the College Graduate Bulletin. Individuals who do not wish to work toward the Master's degree may enroll in the department with the approval of the Department Chairman.

Study abroad programs, previously required for admission at the Graduate School for French and Spanish majors, are now part of the elective courses offered by the department either during the summer or on a yearly basis. Outlines of these programs will be found at the end of the list of elective courses. Further details may be obtained from the Graduate Advisor for the Department of Foreign Languages.

All courses are given in the language of the literature studied, except in Methods courses, such as Language 408.

# REQUIREMENTS FOR THE M.A. DEGREE IN FRENCH

I. General Education (see Master's Degree Program Patterns)	6-12	s.h.
II. Basic Professional Education (see Master's Degree Program Patterns)	6-9	s.h.
III. Specialization	11-20	s.h.
Required Course		
French 505. History of the French Language	2	s.h.
Foundation Courses (minimum 2 s.h.)		
Language 408. Introduction to Language Laboratory		
French 506. Advanced French Phonetics	2	s.h.
Elective Courses	7-16	s.h.
These courses will be closed with December 1 1 1	11 1 0	1

These courses will be elected, with Departmental approval, and will be offered on a rotating schedule so as to enable students preparing for their Master's degree to take at least one course on each century within a year, summer session included. Students specializing in French may elect some courses from other Foreign Language offerings.

Minimum: 32 s.h.

# REQUIREMENTS FOR THE M.A. DEGREE IN SPANISH

	The state of the s		
I.	General Education (see Master's Degree Program Patterns) 6-	12	s.h.
II.	D : D ( : I DI	-9	s.h.
III.	. Specialization 11-2	20	s.h.
	Required Course		
	Spanish 505. History of the Spanish Language Foundation Courses (minimum 2 s.h.)		
	Language 408. Introduction to Language Laboratory	2	s.h.
	Spanish 506. Advanced Spanish Phonetics	2	s.h.
			s.h.

These courses will be elected, with Departmental approval, and will be offered on a rotating basis so as to enable students preparing for their Master's degree to take courses in both areas of Spanish and Spanish-American literature. Students specializing in Spanish may elect some courses from other Foreign Language offerings.

Minimum: 32 s.h.

# GRADUATE COURSES IN FRENCH

# French 505. History of the French Language (formerly Fr. 515) 2 s.h

This course is designed to acquaint the student on the graduate level with the developmental processes in language with special reference to French. It examines also the relationship between language change and cultural change. The French language is studied from its origins to the present time with units in Vulgar Latin, Old French, Middle French, Renaissance French, and Modern French. At each step, development of phonology, morphology, and vocabulary are studied along with social backgrounds.

### French 506. Advanced French Phonetics

2 s.h.

This course is designed to acquaint students on the graduate level with the principles of phonetics and their practical application in acquiring and teaching a correct French pronunciation. Some previous knowledge of phonetics is desirable.

#### French 510. Supervised Individual Study

1 or 2 s.h.

This course is designed to provide students with an opportunity to work in depth on a subject of special interest, or to make up part of a course in which the student has failed or shown specific weaknesses.

# French 511. Medieval French Literature (formerly Fr. 505) 2 s.h.

This course is designed as a survey of the origins and developments of the principal genres during the Middle Ages in France: chanson de geste, literature courtoise, fabliaux, chroniques, theater and poetry.

# French 516. French Literature of the Renaissance (formerly Fr. 506) 2 s.h.

This course is designed to give the student a comprehensive view of the literature and ideas of 16th Century France, including the study of the following authors: Clément Marot, Ronsard, d'Aubigné, Montaigne, Rabelais.

#### French 526. Corneille and Racine

2 s.h.

This course is designed to acquaint students on a graduate level with the evolution of the classical theater in the 17th Century. The dramatic art, psychology and symbolism of Corneille and Racine will be analyzed through extensive reading and intensive discussion of their major plays. The student will be asked to evaluate the impact of these plays in written and oral reports.

#### French 527. Pascal and Descartes

2 s.h

This course is designed to acquaint the student with the writings, ideas and scientific achievements of Pascal and Descartes. Special emphasis will be put on Pascal's Pensées and Provincial Letters.

#### French 533. The Age of Enlightenment

2 s.h.

This course is designed to acquaint the student with the philosophical, educational and social concepts of the century through intensive study of Voltaire, Montesquieu and Diderot.

#### French 534. Le Sage, Marivaux, Beaumarchais

2 s.h

This course will require extensive readings and analysis through oral and written reports of the most important plays of the time, including Turcaret, Le Jeu de l'amour et du Hasard, Le Mariage de Figaro and similar works.

### French 538. The French Novel of the Nineteenth Century 2 s.h.

This course aims at offering the graduate student an insight into the role of masters of French fiction. Major works and literary criticism concerning them will be studied.

#### French 539. Survey of Nineteenth Century French Poetry

2 s.h.

This course is designed to offer the graduate student a survey of the development

of French poetry from Romanticism through the Parnassian School to Symbolism. Important poems of Lamartine, Hugo, Vigny, Musset, Laconte de Lisle, Herodia, Baudelaire, Verlaine, Rimbaud and Mallarmé are read and discussed.

# French 542. The Contemporary Theater (formerly French 407) 2 s.h.

The purpose of this course is to acquaint students on the graduate level with the history and development of the French theater since 1890. Major currents and trends in contemporary drama will be analyzed. Authors studied include Jules Romains, Paul Claudel, Henri de Montherlant, Jean Giraudoux, Jean-Paul Sartre, Albert Camus and other dramatists representative of each major trend of the modern French theater.

#### French 543. The Contemporary Poets

2 s.h.

This course considers the development of French poetry from Symbolism to Surrealism and will include works from such poets as Baudelaire, Rimbaud, Verlaine, Mallarmé, Laforgue, Nerval, Apollinaire, Saint-John Perse, Supervielle, Eluart and Aragon The aim of this course is to convey to the students a deeper appreciation of French poetry through a literary and historical approach and the study of the fundamentals: versification, the technical side of poetry and imagery, the language of poetry.

# French 544. The Contemporary Novel (formerly French 406) 2 s.h.

This course is designed to acquaint students on the graduate level with the history and development of the French novel from Proust to the present day. Major currents and trends are analyzed; works of modern novelists, including Proust, Gide, Malraux, Sartre, and Camus are read and discussed.

#### SENIOR-GRADUATE COURSES IN FRENCH

#### Language 408. Introduction to Language Laboratory

2 s.h.

This course is designed primarily to acquaint language teachers with techniques of language-laboratory utilization and with the preparation of materials for use in the laboratory. Attention is given to equipment—its selection, operation, utilization, and basic maintenance. The course is open to all teachers of foreign languages and to audiovisual specialists, and is taught in English.

#### French 411. Study Abroad (formerly 502)

6-10 s.h.

This course is designed to give teachers and students an opportunity to gain first-hand knowledge of the historical, social, economic, and cultural life of France. This aim will be achieved through visits to various representative sites, tours, and lectures. The program will be conducted in French.

#### French 421. French Language Seminar

2 s.h.

This course is designed to acquaint students on the graduate level with the effective use of the laboratory in language teaching. Problems relating to materials, methods, new techniques, facilities, and scheduling are discussed.

### GRADUATE COURSES IN SPANISH

#### Spanish 505. History of the Spanish Language

2 s.h.

A survey of the development of the Spanish language from its origin to the present day in Spain and Spanish America. The course traces the phonological, structural and lexical evolution of Spanish from its Latin ancestor, by following the process of its transformation, as well as the various stages through which the language has passed from the time of its first documentary appearance.

#### Spanish 506. Advanced Spanish Phonetics

2 s.h.

This course is especially designed for Spanish teachers who wish to acquire a correct pronunciation and enunciation according to the best patterns of speech of the Spanish language as it is spoken by the educated vernacular speakers of Spain and Spanish America.

#### Spanish 510. Supervised Individual Study

1 or 2 s.h.

This course is designed to provide students with an opportunity to work in depth on a subject of special interest, or to cover part of a course in which the student has failed or shown a special weakness.

# Spanish Area

#### Spanish 516. Survey of Medieval Spanish Literature

2 s.h.

A review of outstanding works and themes from Latin, Arabic and Hebrew roots—expressing the main features of Spanish literature, culture and thought from the Eleventh Century jarchas and and cantarcillos de amigo through the Poema del Cid and culminating in La Celestina and the advent of the Golden Age.

#### Spanish 521. The Novel of the Golden Age

2 s.h

A survey of its creation and development from earlier forms through a reading of representative works of the picaresque genre—from Lazarillo de Tormas to El Buscón—as well as the Novelas Ejemplares of Cervantes, emphasing their ethical and artistic values and influence in the main stream of European literature.

#### Spanish 522. The Theater and Poetry of the Golden Age

s.h

Poetic currents of the Siglio de Oro beginning with the Renaissance period, from the lirica popular and the Romancero through the adoption of the Italian forms and metres and the mystic poets to the Baroque period. In the drama, representative plays of Lope de Vega, Tirso de Molina, Calderón de la Barca and Ruiz de Alarcón are read and analyzed against the historical background of the 16th and 17th Centuries.

#### Spanish 524. Seminar in Cervantes

2 s.h.

This course is designed to study Cervantes as a figure of synthesis in the art of the novel in Spain. El Quijote, the Novelas Ejemplares and Persiles y Segismunda will be analyzed. Oral and written reports will be prepared by the student.

#### Spanish 526. Spain in the XIX Century

2 s.h.

This course will aim at providing an understanding of the historical, cultural and political developments of Nineteenth Century Spain. Readings and discussions of the most representative authors of the romantic, neo-classicist and realistic trends.

#### Spanish 532. The Short Story in Spain (formerly Span. 430A)

2 s.h

This course covers the study of the origin and development of the short story in Spain from the Middle Ages to the present time. Different types of short stories are studied in order to explain historically and sociologically the appearance of themes written in Spanish through the centuries. The aim of the course is to give the student additional understanding of the Spanish people, culture and history as expressed by the short story from the Thirteenth Century to the present.

# Spanish-American Area

#### Spanish 540. Sarmiento and His Times

2 s.h.

The purpose of this course is the study of the culture and civilization of the Rio de la Plata region and Chile from the period of Independence to the beginning of "Modernismo" through the most important figure of this period. Relations with the United States will be discussed.

#### Spanish 541. Spanish-American Novel (formerly Span. 506)

2 s.h.

The purpose of this course is to acquaint the student, through extensive reading and intensive discussion, with representative Spanish-American novels from the Sixteenth Century through the Twentieth Century. These works include narratives depicting life in early colonial times; the novel of adventure; the picaresque tale; the romantic novel; the psychological novel; the novel of the land; the sociological novel; the artistic modernista novel, the political novel; the novel of the Mexican revolution; the social, the neorealistic, the impressionistic and the philosophical novel.

#### Spanish 546. Seminar in Modernismo

2 s.h.

A critical re-evaluation of the "Modernist" phase of Spanish-American poetry: 1882-1917. Special emphasis will be given to individual techniques and characteristic use of specific images, the reliance on Synesthesia and the attempt to incorporate pictorial elements into poetry which welded these individuals into a genuine poetic movement. Each participant is expected to present a piece of original research at a designated time during the course-term.

# Spanish 548. Spanish-American Essay

2 s.h.

A careful reading of selected Spanish-American authors representing a cross section of all Spanish-speaking social classes and tendencies in order to evaluate their reactions through their written expressions. A comparison of the main essayists with their contemporaries in Spain and in the United States will show the tenor of political thought, inter-influences between the United States and Spanish-America and the most important viewpoints of Spanish-American intellectuals.

# Spanish 549. The Short Story in Spanish-America (formerly Span. 430B)

2 s.h.

This course will cover the development of the Spanish-American short story from its origins in the Colonial Times. Representative authors will be included to show the evolution of the genre up to the present time.

# Spanish 551. Contemporary Spanish-American Poetry (formerly Span. 425)

This course considers the development of Spanish-American poetry from the antimodernist reaction, and the four major feminine poets, as antecedent for the appreciation and evaluation of Neruda, Pellicer, Mareschal, Borges, Gorostiza, Carrera Andrade, Florit, Villaurrutia and Octavio Paz. Readings from recently published books and poetry magazines of wide circulation in Spanish America are included.

# SENIOR-GRADUATE COURSES IN SPANISH

#### Language 408. Introduction to Language Laboratory

2 s.h.

This course is designed primarily to acquaint language teachers with techniques of language-laboratory utilization and with the preparation of materials for use in the laboratory. Attention is given to equipment—its selection, operation, utilization, and basic maintenance. The course is open to all teachers of foreign languages and to audio-visual specialists, and is taught in English.

#### Spanish 411. Study Abroad (formerly 502)

6-10 s.h.

This course is designed to give teachers and students an opportunity to gain first-hand knowledge of the historical, social, economic, and cultural life of Spain. This aim will be achieved through visits to various representative sites, tours, and lectures. The program will be conducted in Spanish.

#### DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION

Graduate Advisor: DR. JOHN REDD

The graduate program in Panzer School of Health and Physical Education is designed to increase the knowledge, understanding and techniques of the in-service teacher. Emphasis will be given to the preparation of teachers for specialized work or master teaching in health and physical education. The techniques and skills of research are developed to enrich and improve the programs of the schools in New Jersey.

A major or minor in health and/or physical education from an accredited college or university constitutes a minimum requirement for admission. Other admissions requirements are discussed elsewhere in the *Graduate Bulletin*.

A candidate for the Master of Arts Degree in Health and/or Physical Education should consult the Graduate Advisor of the Panzer School of Health and Physical Education before matriculation. The student with a minor preparation in health or physical education will be requested to undertake designated prerequisites as a part of his program. The student with a major in the above fields may be requested to undertake additional work where deficiencies are apparent. The prerequisite requirements will be in addition to the minimum 32 semester-hour work program.

A comprehensive written-oral examination is required of all candidates for the Master of Arts degree with the exception of those students who elect Graduate 600, Master's Thesis, in which the student earns four semester-hours credit.

# REQUIREMENTS FOR THE MASTER'S DEGREE IN HEALTH OR PHYSICAL EDUCATION

6-12 s.h.

I. General Education (see Master's Degree Program Patterns)

II. Basic Professional Education (see Master's Degree Program Patterns) 6-9 s.h.
III. Specialization 11-20 s.h.
Students may pursue a concentration in either Physical Education or Health Education. Each sequence will have certain required courses. Electives may be selected from either area within the limits outlined under Elective Courses below up to a maximum of 20 semester hours of required and elective courses under specialization.
A. Required Courses—Physical Education Sequence 12 s.h.
1. Physical Education 603. Research Seminar in Physical Education and Health
2. P.E. 575. Foundations and Interpretation of Physical Education 2 s.h.
3. P.E. 576. Curriculum Development in Physical Education; or P.E. 577. Administration and Supervision of Physical Education 2 s.h.
4. P.E. 578. Physical Education for Exceptional Children
5. P.E. 579. Advanced Tests and Measurements in Physical Education 2 s.h.
6. H.E. 526. Curriculum Development in Health Education; or H.E. 529. Seminar in Basic Issues in Health
B. Required Courses—Health Education Sequence
1. Physical Education 603. Research Seminar in Physical Education and Health
2. H.E. 525. History and Foundations of Health
3. H.E. 526. Curriculum Development in Health Education
4. H.E. 411. School Health Services; or
H.E. 527. Healthful School Living 2 s.h.
5. H.E. 528. The Evaluation of Health
6. H.E. 529. Seminar in Basic Issues in Health

C. Electives 0-8 s.h.

The selection of electives will be determined through advisement and will be based on the needs and interests of each individual.

Minimum: 32 s.h.

# **GRADUATE COURSES**

# Health Education

#### H.E. 500. Health Aspects of Family Living

2 s.h.

This course deals with problems of growth and development, reproduction, heredity, and social and emotional aspects of sexual development. The role of the family in to-day's culture and problems of family relations are examined. Prerequisite: A basic course in Health Education.

### H.E. 501. School Safety

2 s.h.

This course will deal with all aspects of safety relating to the well being of school personnel. Incidence of accidents and their cause, safety hazards, disaster control, and development of a school safety program will be considered.

#### H.E. 525. History and Foundations of Health

2 s.h.

The history of the health movement is traced from 1000 B.C. to the present with special emphasis on certain periods that serve as landmarks in man's progress in health promotion. The unique role of the school as one agency in health promotion is considered in depth. The foundations for programs of health are studied in relation to scientific advancements and prevailing philosophies.

#### H.E. 526. Curriculum Development in Health Education

2 s.h.

The purpose of this course is to provide the student with opportunities to improve his skills and techniques in curriculum construction. The frame work of the curriculum and criteria for selection of curricular experiences will be undertaken. A review and analysis of appropriate teaching methods, materials and evaluation procedures will also be considered. Prerequisite: A methods course in Health Education.

#### H.E. 527. Healthful School Living

2 s.h.

School environment, organization of the school day, and the inter-personal relationships favorable to emotional, social and physical health are examined in this course. Standards for building construction and policies are studied as they relate to the school environment. The policies and procedures of schools that contribute to the emotional health of students are considered. Prerequisite: A basic course in Health Education.

#### H.E. 528. The Evaluation of Health

2 s.h.

The procedures useful in determining the effectiveness of the school health program and its several phases are considered. The purposes of evaluation, devices available, and administrative problems are discussed. The development and interpretation of evaluation devices are an important part of the course. Prerequisite: A methods course in Health Education.

# H.E. 529. Seminar in Basic Issues in Health

2 ch

This course is designed to survey current trends in the organization, administration, and teaching methods of health education. The content of the course will be based on the developed objectives evolved by the students and teacher in light of their experiences. Prerequisite: A methods course in Health Education.

# Physical Education

# P.E. 550. Survey of the Literature and Trends in Physical Education 2 s.h.

Students will be required to survey comprehensively books, periodicals, and other teaching materials in the field of physical education. They will also identify the outstanding authors and be familiar with their basic philosophies.

# P.E. 551. Philosophy of Recreation in School and Community 2 s.h

Presents a survey of the development of recreational philosophies and a study and evaluation of the modern philosophy in America. The organization of recreation in school and community, the importance of leadership, social and cultural implications, economic, governmental and leisure time influences, and a study of current practices will be undertaken.

#### P.E. 552. Seminar in Current Problems in Men's Athletics

2 s.h.

The organization and administration of intramural and inter-scholastic athletic programs will be considered in this course. Current practices related to crowd control, scheduling, promotion of the program, personnel, and other persistent problems identified by the students will be discussed. Trends in such areas as sports medicine, coaching and officiating will also be considered.

# P.E. 553. The Development and Conduct of Extra Curricular Physical Education for Girls 2

Cultural, educational, economic and physical aspects in the selection of appropriate activities will be considered. Objectives in relation to desired outcomes will be established on the basis of group needs. Types of program organization and planning will be discussed, motivation, publicity and awards will be considered, programs in operation will be examined, and literature and research projects will be reviewed.

#### P.E. 554. Orientation in Sports Medicine

2 s.h.

New techniques, materials, modalities, and problems related to the prevention and care of athletic injuries will be covered. Appropriate current developments in the field of sports medicine will be discussed and studied along with new concepts and activities for conditioning for both the athlete and non-athlete. Prerequisite: Courses in the Prevention and Care of Athletic Injuries, Kinesiology, and Physiology of Exercise.

# P.E. 555. Scientific Analysis of Sport and Physical Education Skills 2 s.h.

This course is concerned with the principles of efficient movement as determined through research in allied fields. A study of mechanical and physiological principles will be undertaken to emphasize their importance in accelerating and improving motor learning as well as efficient body movement. Laboratory exercises, projects and demonstrations will be the primary methods involved.

# P.E. 575. Foundations and Interpretation of Physical Education 2 s.h.

A brief review of the history of physical education with emphasis on the development of physical education in the United States. Exploration of modern theories and philosophies of physical education in the United States and in foreign countries. A study of the scientific basis and foundations of physical activity and their relation to performance and fitness. Prerequisite: A course covering the history and principles of Physical Education.

#### P.E. 576. Curriculum Development in Physical Education 2 s.h.

A study of the selection of appropriate physical education activities for elementary and high school programs based on principles of growth and development and psychological and sociological needs. Current trends and practices will be investigated and evaluated. Opportunities will be made available for working in the student's particular area of interest, and to identify the relationship of physical education programs at all levels, and of physical education to other areas of instruction in the school curriculum. Prerequisite: Methods course in elementary and secondary physical education. (Formerly P.E. 450.)

# P.E. 577. Administration and Supervision in Physical Education 2 s.h.

This course will concern itself with the role of the teacher and administrator in supervision in physical education. Techniques of interviews, visitation, conference and others will be studied in reference to their use with student teachers, beginning teachers, and experienced teachers. Supervision of both physical education and classroom teachers will be considered. Prerequisite: Three years of teaching experience.

# P.E. 578. Physical Education for Exceptional Children

2 s.h.

An advanced course in the adaptation of physical education for the exceptional

child. The aims, objectives, principles and underlying philosophy will be reviewed. The administration, organization and development of such programs in the schools will be discussed at length. Current trends will also be evaluated. Prerequisite: An undergraduate course in adapted or corrective physical education.

# P.E. 579. Advanced Tests and Measurements in Physical Education 2 s.h.

A survey will be made of the development of new tests and techniques for determining levels of skill, status in growth and development, and for the various qualities which contribute to total physical fitness. Advanced techniques for processing data also will be considered. Prerequisite: A course in educational statistics.

# P.E. 603. Research Seminar in Physical Education and Health 2 s.h.

The purpose of this course is to examine the principles upon which research is based in physical education and health and to familiarize students with important studies, programs, personnel and techniques employed in research in this area. Each student will be required to complete a research project which must be presented to the physical education faculty for approval. Prerequisite: Educ. 503.

#### SENIOR-GRADUATE COURSES

#### Health Education

### H.E. 408. Driver Education

3 s.h.

Part I: This part consists of a minimum of 40 hours of class recitations and discussions for which home reading and study have been assigned. The following topics are included: (1) history and development of driver education and training programs; (2) objectives of driver education; (3) local, state, and national traffic safety programs; (4) driver qualifications; (5) psycho-physical testing; (6) curricular content of courses in driver education and training; (7) construction, operation, and maintenance of automobiles; (8) traffic laws and driver licensing; (9) traffic engineering; (10) pedestrian education and protection; (11) equipment for teaching driver education; (12) liability, costs, and insurance; (13) driver education as a part of the program of the high school; (14) public relations; (15) records and reports; and (16) visual aids in teaching driver education.

Part II: This part consists of a minimum of 20 hours devoted to the following: (1) behind-the-wheel instructions; (2) demonstrations and student-teacher practice in the car; and (3) road tests in traffic. Home reading and study are required in preparation for these projects. Prerequisite: Driver's license with three years of driving experience with satisfactory driving record.

#### H.E. 411. School Health Services

2 s.h.

The student is familiarized with the health services in the school. The part the teachers plays in coordinating activities with the medical staff is emphasized. Prerequisite: A basic course in Health Education.

#### H.E. 412. Alcohol Education Workshop

2 s.h.

This is a workshop course offered with the cooperation of the State Department of Health and aimed at preparing teachers and other school personnel for more understanding service in this special area of education. The workshop covers the physiological, sociological and psychological problems involved in the use of beverage alcohol and on the materials, sources, and techniques found to be most useful in alcohol-education programs.

#### H.E. 415. Community Health

2 s.h.

A study of the health needs of a community in relation to water supply, air purification, sewage and garbage disposal, food standards, housing, disease and pest control, and other related areas. Health problems are considered in the light of public health services and attention given to protective as well as corrective measures. The

course is conducted through field trips, surveys, lectures and the use of audio-visual aids. (Formerly Community Hygiene). Prerequisite: A basic course in Health Education.

# **Physical Education**

#### P.E. 410. Water Safety and First Aid

2 s.h.

This course includes intensive instruction in swimming, diving, water sports, boating, canoeing, water safety, and first aid. Students can qualify for Red Cross certificates during this course.

#### P.E. 415. Movement Techniques and Rhythmic Accompaniment

This course is designed to develop skill and understanding of body movement techniques and the rhythmic accompaniment of such techniques. Lectures, reading assignments, demonstrations, and participation will be utilized to relate anatomical structure and function to these movement techniques and to develop teaching skill.

#### P.E. 420 Dance As An Art Form

2 sh

Experimentation in the use of time, space, and energy as applied to the dance medium. An exploration of modern dance as an art from with opportunity provided for individual and group choreography. Prerequisite: A course in Modern Dance.

# DEPARTMENT OF INDUSTRIAL ARTS EDUCATION

Graduate Advisor: DR. CARL F. FRANKSON

Graduate work in the Department of Industrial Arts Education is designed to help teachers of industrial arts (1) to become more proficient in teaching through study of recent trends and new developments in the field, (2) to improve organization of the industrial arts laboratory, and (3) to provide a basis for work in supervision and administration. Advanced work in industrial arts and related areas which will meet needs and broaden professional experiences of industrial arts teachers is emphasized.

Individuals who have an undergraduate major in this area, but who do not wish to work toward a degree, may enroll in graduate courses in the department with the consent of the adviser.

A comprehensive written-oral examination is required of all candidates for the Master's degree with the exception of those students who elect Graduate 600, Master's Thesis, in which the student earns four semester hours credit.

# REQUIREMENTS FOR THE M.A. DEGREE IN INDUSTRIAL ARTS

I.	General Education (see Master's Degree Program Patterns)	6-12	s.h.
II.	Basic Professional Education (see Master's Degree Program Patterns)	6-9	s.h.
III.	Specialization	11-20	s.h.
	Required Courses	9	s.h.
	501. Curriculum Content and Course Organization		
	502. Shop Planning and Equipment Selection		
	603. Research Seminar in Industrial Arts	3	s.h.
	Electives	2-11	s.h.

Remaining industrial arts courses will be selected from the following offerings, subject to the approval of the graduate advisor. Students must balance laboratory courses with lecture-seminar courses based on needs and interests of each individual.

# Laboratory

Laboratory	
411. Industrial Photographic Techniques	s.h.
432. Power Technology	s.h.
431. Advanced Electronics	s.h.
422. Industrial Plastics Techniques 3	s.h.
Seminar Courses	
508. Historical and Contemporary Industrial Arts Literature	s.h.
511. Supervision of Industrial Arts	
601. Independent Studies in Industrial Arts	s.h.
Graduate Thesis 4	
Subject to approval by the graduate advisor and the departmental committee.	

Minimum: 32 s.h.

# **GRADUATE COURSES**

# Ind. Arts 501. Curriculum Content and Course Organization

3 s.h.

Curriculum construction techniques used in developing a program of industrial arts are studied. Special emphasis is placed on the development of industrial arts courses and instructional materials.

# Ind. Arts 502. Shop Planning and Equipment Selection

3 eh

Principles of planning and equipment selection for modern industrial arts laboratories are stressed. The practical application includes architectural aspects, floor plan layouts, equipment selection, bid preparations, and construction of scaled laboratory models.

Ind. Arts 508. Historical and Contemporary Industrial Arts Literature 3 s.h.

Published material related to industrial arts is surveyed to determine its applicability

to laboratory teaching and professional improvement. This includes historical writings on the development of industry and industrial education, research literature in the field, published materials provided by corporations and government agencies, and pertinent reference works, handbooks, and periodicals.

# Ind. Arts 511. Supervision of Industrial Arts 3 s.h.

Principles and practices of supervision, as related to the modern industrial arts laboratory are discussed and evaluated. Special attention is given to supervisory techniques, budget supplies, inventories, maintenance, safety, and upgrading of in-service teachers.

# Ind. Arts 601. Independent Study in Industrial Arts 3 s.h

This course is designed to allow students to pursue study on individual problems under the guidance of a sponsoring faculty member. In addition, credit may be obtained for I.A. 601 upon completion of an approved industrial course related to the student's special area of interest. Registration for this course is by permission of adviser only.

#### Ind. Arts 603. Research Seminar in Industrial Arts 3 s.h.

Two patterns of research are considered in this seminar: (1) Industrial research techniques with materials and processes as they may be adapted to industrial arts programs in public school, (2) Education research techniques as they are applied to problems in industrial arts education. Prerequisite: Educ. 503.

# SENIOR-GRADUATE COURSES

# Ind. Arts 407. Field Studies of Industry

4 s.b.

A broad range of industrial firms is visited to note and evaluate the processes used, the materials employed, the working conditions instituted, and the labor relations practiced. Every attempt is made to visit representative industries in the metropolitan area.

#### Ind. Arts 411. Industrial Photographic Techniques

3 s.h.

Industrial equipment, materials and processes are used and evaluated in connection with a variety of experiences in industrial photography.

Open to senior or graduate industrial arts majors and others meeting prerequisite—I.A. 141 and 142 or approval of instructor.

#### Ind. Arts 412. Design in Industry

3 s.h.

The industrial designer's approach to design dictates the material and activities in this course. Students engage in all the activities involved in the design of a product for production and purchase in contemporary society.

Open to senior or graduate Industrial Arts and Fine Arts students.

#### Ind. Arts 421. Jewelry Making and Lapidary

3 s.h.

Through laboratory experiences students have the opportunity to develop lapidary and jewelry making skills. They will design pieces that will involve casting and wrought jewelry processes. The lapidary experiences cultivate skills in sawing, shaping, polishing, and mounting stones to exhibit their inherent qualities.

#### Ind. Arts 422. Industrial Plastics Techniques

5 s.h.

An advanced technical course in the industrial area of plastics. Study is based upon foundation material and concerned with developing technical proficiency and mechanical skill in regard to injection molding, extension molding, compression molding, transfer molding and laminating. Prerequisite: I.A. 381 or equivalent or permission of instructor.

# Ind. Arts 431. Advanced Electronics

3 s.h

An overview of our current electronic technology with emphasis placed upon the applications of electronic circuitry to communications and control systems.

Prerequisites for the course are a basic knowledge of A.C. and D.C. circuit theory and a familiarization with power supply, amplifier, and oscillator circuits.

# Ind. Arts 432. Power Technology

3 s.h.

An advanced technical study of internal and external combustion engines and of fluid power. In addition to the study of established engines, power sources in the developmental stage will be examined. Much of the course work will consist of work on individual problems in power. Prerequisite: I.A. 252 or permission of the instructor

#### Ind. Arts 442. Conservation of Basic Industrial Materials 2 s

Students, while living for ten days at the New Jersey School of Conservation. Stokes State Forest, study the origin, development use, and consumption of basic materials as they exist in nature, by taking field trips to resources and industries, by employing a variety of instructional aids, and by talking with specialists in each area

# Ind. Arts 443. The Use and Processing of Basic Industrial Materials by Modern Industry 2 s.h.

Students live for ten days at the New Jersey State School of Conservation. Study is devoted to recognition, use, and processing of basic natural materials, such as ores. wood, fuels, and agricultural products to improve their value as industrial materials. such as leather and plastics. The course is developed through the use of films, field trips, and discussion with industry specialists.

## DEPARTMENT OF MATHEMATICS

Graduate Advisor: Dr. Anthony J. Pettofrezzo

The graduate courses in mathematics are designed to meet the needs of teachers in service. There is opportunity for further study in pure mathematics, in applied mathematics, and in the teaching and supervision of mathematics. The courses in pure mathematics are designed to extend the student's knowledge of subject matter and to provide him with the background needed for teaching adequately in both traditional and experimental programs at the junior and senior high school levels. The courses in applied mathematics show the applications of mathematics in related areas of the physical, biological, and social sciences. The courses in teaching and supervision give attention to the current problems and proposals in mathematics education, the organization and construction of course syllabi, and administrative problems.

# REQUIREMENTS FOR MATRICULATION

A candidate for the Master of Arts Degree in Mathematics should consult the Graduate Advisor of the Mathematics Department before matriculation since the choice of graduate courses should be adjusted to the preparation acquired in undergraduate work. The student's work program, for a minimum of thirty-two semester-hours of work, is prepared in consultation with the Graduate Advisor. Any changes in the work program are made only with the written approval of that advisor.

The candidate for the M.A. degree must present an undergraduate major of at least twenty-four semester-hours of mathematics. Any deficiencies must be made up prior to conferment of the degree. This must be done in courses approved by the Graduate Advisor.

The candidate for the M.A. degree must satisfy the general admission and matriculation requirements of the College as set forth in the Graduate Bulletin.

#### REQUIREMENTS FOR THE M.A. IN MATHEMATICS

I. General Education (see Master's Degree Program Patterns)	6-12 s.h.
II. Basic Professional Education (see Master's Degree Program Patter	rns) 6-9 s.h.
III. Specialization:	11-20 s.h.
Each candidate must take at least one course in each of the	following sets:
Math. 503 and 504	12 s.h.
Math. 532 and 533	12 s.h.
Math. 523 and 524	12 s.h.
Math. 407, 518 and 519	12 s.h.
Math. 501, 506 and 529	12 s.h.
Math. 640	12 s.h.
Electives (after consultation with Graduate Advisor)	0-8 s.h.

A final examination in mathematics is given all candidates prior to the conferment of the degree. This examination is general in nature and is designed to test the candidates.

of the degree. This examination is general in nature and is designed to test the candidate's maturity of thought in mathematics and mathematics education.

Minimum: 32 s.h.

### **GRADUATE COURSES**

### Math. 501. Administration and Supervision of Mathematics 2 s.h.

This course is concerned with the problems met in organizing and supervising the teaching of mathematics. The topics considered are the functions and qualifications of the supervisor of mathematics, in-service training of teachers, demonstration lessons, professional attitude and preparation of teachers, department meetings, selection of texts, current problems, research and the basis for determining objectives.

IV. Departmental Examination

#### Math. 503. Foundations of Algebra

2 s.h.

Careful consideration is given to the fundamental concepts and postulates which form the foundation of algebra. The modern algebraic theories of groups, rings, and number fields are introduced. The development of our number system and the general theory and use of polynomial functions are considered.

#### Math. 504. Modern Algebra

2 s.h.

Vectors and vector spaces are introduced as generalizations of numbers and number systems. Particular attention is also given to matrices, determinants, and linear dependence. Applications are considered. Prerequisite: Math. 503.

### Math. 506. Principles of Teaching Secondary School Mathematics 2 s

The primary purpose of this course is to relate recent psychological research into the learning process to the presentation of specific areas of secondary-school mathematics. Among the topics considered are: motivation, concept formation, drill, transfer of training, problem solving, and provisions for individual differences.

### Math. 507. Teaching of General Mathematics

2 s.h.

This course is concerned with mathematics programs for the non-college-bound high school student. Reports and recommendations from curriculum studies are examined. Among the topics considered are: basic characteristics and needs of non-academic rtudents, preparation and use of resource materials, classroom teaching techniques, and methods of motivation. The role of remedial arithmetic and consumer mathematics is explored.

# Math. 512. Numerical Analysis

2 s.h.

This course deals with the determination of functions from observed experimental data. Among the topics considered are: finite differences, symbolic operators, differencing, interpolation formulae, the method of least squares, and harmonic analysis. The course is designed to show the nature of mathematics as an applied science.

#### Math. 513. Computer Programming

2 s.h.

This course is concerned with the use of a computer to solve problems, including some from secondary school mathematics. Problem solving methods suitable for a stored-program computer and programming languages are considered. Prerequisite: Math. 512 or permission of the instructor.

#### Math. 518. Theory of Functions of Real Variables

2 s.h.

The fundamental properties of real numbers and the elementary properties of functions of real variables are systematically developed. Among the topics considered are: continuity, differentiability, integrability, algebraic and transcendental functions, hyperbolic functions, and infinite series. Prerequisite: Math. 407.

# Math. 519. Theory of Functions of Complex Variables

2 s.h.

The fundamental properties of complex numbers and the elementary properties of functions of complex variables are developed. These include the properties of mappings, line integrals, Cauchy-Goursat Theorem, and conformal mapping. The practical applications of the theory are stressed by the use of illustrative examples. Prerequisite: Math. 407 or permission of the instructor.

#### Math. 523. Theory of Probability

2 s.h.

This course develops probability theory as a mathematical model describing random phenomena. Topics include: basic probability theory for finite sample spaces, random variables and functions of random variables, particular probability distributions, certain limit theorem, sequences of random variables and Markov processes. While the emphasis is on mathematical proof, a variety of applications in both the physical and the social sciences are developed. Prerequisite: Math. 307 or 422.

# Math. 524. Statistical Inference and Sampling Theory

2 s.h.

This course is concerned with making inferences from sample data and with evaluating risks connected with these procedures. Topics include: sampling distributions, point and interval estimation, tests of hypotheses, regression and correlation, elements of analysis of variance and nonparametric statistics. Prerequisite: Math. 523.

#### Math. 529. Curriculum Construction in Mathematics

2 s.h.

This course is concerned with the implications and classroom implementation of contemporary recommendations for college preparatory curriculums in secondary school mathematics. The work of major curriculum groups is explored in detail, together with an examination of the mathematical concepts underlying these programs.

# Math. 530. Mathematics Materials for the Teacher of Mathematics 2 s.h.

This course is concerned with the adaptation and use of materials to motivate and improve the teaching of high school mathematics. Particular attention is given to the equipment needed for a modern mathematics laboratory; to the effective use of such audio-visual equipment as the overhead projector; to the use of mathematical films and film-strips; to the construction and use of mathematical models; and to books, periodicals, and pamphlets needed for the school and for the teacher's library. Material available for individual and club activities in mathematics is considered.

#### Math. 532. Projective Geometry

2 s.h.

The methods of synthetic and analytic projective geometry are compared and used to emphasize the fundamental concepts of Euclidean geometry. Emphasis is placed upon the dependence of many common properties and theorems of Euclidean geometry and upon the properties of lines, parallelism, perpendicularity, similarity of figures, and the definition of distance. Prerequisite: Math. 412 or permission of the instructor.

## Math. 533. Non-Euclidean Geometry

2 s.h.

The development of hyperbolic non-Euclidean and of elliptic non-Euclidean geometry is carefully traced. A brief survey of the historical development of each is given. This course is designed for teachers and students of mathematics who desire a better perspective of the field of geometry. Prerequisite: Math. 412 or permission of the instructor.

#### Math. 551. Mathematics of Social Sciences

2 s.h.

This course surveys the mathematics of economics, business, sociology, and psychology. The discussion includes such topics as: theory of investments, distribution of wealth and income, use of charts and graphs, business trends, and measurement and presentation of data in social sciences.

# Math. 552. Applied Mathematics

2 s.h.

This course consists of a review of the fundamental ideas of mathematical analysis including analytic geometry and calculus as they apply to the solution of problems in physical science. Vectors are introduced and applied to the solution of problems in physics. The mathematical content of the modern science curriculum is considered at appropriate areas of the course.

#### Math. 553. Applied Mathematics

2 s.h.

This course is an extension of Mathematics 552. The differential equations of science are considered along with techniques of harmonic analysis. Prerequisite: Math. 552.

#### Math. 602A, 602B, 602C. Workshop on Secondary School Mathematics

2 s.h. each

These courses are conducted as workshops to provide teachers with increasing insight into contemporary mathematics. The emphasis is upon mathematical principles and concepts. Topics are selected for their significance in revisions of secondary school mathematics programs. Areas covered include those necessary to develop competence in teaching contemporary courses in high school algebra and geometry, as well as the senior year program in high school mathematics.

# Math. 603A, 603B, 603C. Workshop on Junior High School Mathematics

2 s.h. each

These courses provide the necessary mathematical background to understand and interpret current curriculum recommendations in the junior-high school. Areas covered include: structure of the number system, mathematical systems, probability, foundations of algebra, and foundations of geometry, each of which is oriented for junior high school teachers.

# Math. 640. Research Seminar in Mathematics

2 s.h.

This course will be taken to satisfy the two semester-hour research requirement. Prerequisite: Educ. 503.

# SENIOR-GRADUATE COURSES

# Math. 405. History of Mathematics

2 s.h.

This course surveys the history of elementary mathematics, through calculus, from ancient times to the present. Emphasis on the major developments in the fields of arithmetic, algebra, and geometry and on contributions of leading mathematicians. The solution of mathematical problems in their historical context is an important part of the course. A by-product is the motivation effect of historical information on the teaching and learning of mathematics.

### Math. 407. Advanced Calculus

3 s.h.

The purposes of this course are twofold: fundamental notions of calculus such as sequences, limits, differentiation, integration, the Generalized Theorem of the Mean, partial derivatives, multiple integrals and infinite series are rigorously developed and examined; also, some extensions of these basic concepts are introduced. In this latter set are such topics as: line integrals through Green's Theorem, Fourier series, elliptic integrals, and gamma and beta functions. Prerequisite: Math. 202.

#### Math. 409. Elements of Finite Mathematics

2 s.h.

Topics considered in this course are those dealing with finite, rather than infinite sets. Included are such topics as: sentences and statements, truth tables, sets, Boolean algebra, and linear programming. Applications of mathematical techniques in the social sciences are stressed throughout the course.

#### Math. 410. Mathematics of Finance

2 s.h.

This course introduces the elementary theory of simple and compound interest and leads to the solution of practical problems in annuities, sinking funds, amortization, depreciation, stocks and bonds, installment buying, and savings and loan associations. It discusses the mathematics of life insurance covering the following: the theory of probability as related to life insurance; the theory and calculation of mortality tables; various types of life annuities and insurance policies and reserves. This course gives a helpful background to the mathematics teacher and aids the student of economics and insurance.

#### Math. 411. Elements of Mathematical Thought

2 s.h.

This course acquaints students having a limited background in mathematics with the logical structure of mathematics. There is an emphasis on postulational foundations and the reasoning process itself. Topics include: the nature of mathematical knowledge, the origin and influence of logical systems, essentials of logical reasoning, and examples of logical systems from algebra and geometry.

#### Math. 412. Foundations of Geometry

3 s.h.

In this course a study is made of postulates for various geometries. Euclidean geometry is considered as a special case of affine and projective geometries. The course includes a comparison of non-Euclidean geometries.

# Math. 415. Differential Equations

2 s.h.

Applications of differential equations and their standard methods of solution are treated in this course. Topics are: linear differential equations of the first degree and of the first and higher orders, linear equations of the nth order with constant coefficients, linear equations of the second order, exact and total differential equations, simultaneous equations, numerical approximation, and series solutions.

#### Math. 417. Theory of Numbers

2 s.h.

This course offers a systematic development of classical number theory along with a discussion of the historical background. The treatment employs current set-theoretic notation to make the traditional topics more meaningful. It includes such topics as prime and composite numbers, Euclid's algorithm, congruences, diophantine equations, quadratic residues, and the Euler-Fermat theorems.

# Math. 422. Introduction to Probability and Statistics

2 s.h.

This course surveys the major concepts of elementary probability and statistics and serves as an introduction for students who have had no previous work in this field. Topics include: probability theory for finite sample spaces, elements of combinatorial theory, binomial distributions, continuous distributions, functions of random variables,

and problems of estimation and tests of significance. Students credited with Math. 307 may not take this course for credit.

#### Math. 432. Introduction to Topology

3 s.h.

The aim of this course is to introduce the student to some of the terminology, concepts, and methods of a rich branch of mathematics which has proved to be a fertile area for current research in mathematics. Special emphasis is to be placed on the "topological" structure of the familiar real line (set of real numbers), ordinary Euclidean space, and metric spaces in general. This course is designed to provide a background for both understanding more fully the results of classical analysis (calculus), and for studying "modern" analysis.

#### Math. 440. Contemporary Programs in Secondary Mathematics

This course is concerned with an exploration of contemporary curricula in secondary mathematics. The recommendations of various curriculum studies are explored, and problems of implementation considered. Major attention is given to the programs of grade eleven and twelve. The Advanced Placement program is also considered.

#### Math. 453. Differential Calculus

3 s.h.

Concepts of differential calculus are developed for science students who have taken one year of college mathematics. Topics include: functional relationships, slope, limit, continuity, graphical representations of science problems, differentiation of algebraic and transcendental functions, geometric and physical application of derivatives, velocity, and acceleration in curvilinear motion. Applications are developed utilizing the scientific background of the students. Students credited with Math. 201 may not take this for credit.

#### Math. 454. Integral Calculus

3 s.h.

Concepts of integral calculus are developed for students who have completed Math. 453 or equivalent. Topics include: integration procedures, solid analytic geometry, and geometrical and physical applications of the definite integral in two and three dimensional problems. Applications utilize the scientific background of the students. Students credited with Math. 202 may not take this for credit.

#### Math. 480. Elements of Logic

2 s.h.

This course develops an understanding of methods of reasoning used in the mathematical sciences. The point of view and elementary processes of symbolic logic are studied. Background materials are included for teaching of logical concepts in secondary schools.

# DEPARTMENT OF MUSIC

Graduate Advisor: Dr. ALEX ZIMMERMAN

Advancement of music education in New Jersey has led to the establishment of a Master of Arts program in music at Montclair State College. The program is intended:

- to offer music teachers in the New Jersey public schools an opportunity to gain further professional preparation for the improvement of their teaching skills;
- to provide an opportunity for students to deepen and enrich their program in general education; and to enable them to acquire a more advanced grasp of the problems in professional education; and to move forward in their fields of specialization;
- to encourage the spirit of scientific inquiry and creative, original, and independent thought by providing training and experience in educational research;
- 4. to encourage the teacher to gain the requisite status for professional advancement.

# Admission Requirements and Screening Procedures

- 1. The requirements established for all graduate studies and for matriculation at the College will be followed in respect to this program.
- Applicants with a doubtful undergraduate record may be asked by the Music Department and the Chairman of Graduate Studies to take a qualifying examination.
- Candidates for matriculation are required to submit before a jury of the music faculty, evidence of the level of accomplishment in the primary instrument, piano, and in theoretical subjects.

# Course Requirements

It is expected that students will vary widely in the number, spread, and depth of undergraduate preparation in their areas of specialization. The student will be advised to select a program of courses which will provide him with a breadth of experience in music, since this is a necessary background for teaching music in the elementary and secondary grades. If a student has sufficient breadth he will be advised to select a sequence in a musical medium of his choice to acquire a high level of achievement in his area. Courses in music history and the philosophy of music will be offered for those students who lack this background, or have a special interest. In the area of specialization, Music 603—Seminar in Research in Music Education—will be required of all students except those who elect Graduate 600—Master's Thesis—creative work (composition, or distinguished performance involving research skill as well as technical mastery of performance may be substituted in this program, in which the student earns four semester hours of credit.

A comprehensive written-oral examination is required of all candidates for the Master's degree with the exception of those students who elect Graduate 600—Master's Thesis.

# REQUIREMENTS FOR THE M.A. IN MUSIC

I. (	General Education (see Master's Degree Program Patterns)	6-12	s.h.
II.	Basic Professional Education (see Master's Degree Program Patterns)	6-9	s.h.
	A. Education 503	2	s.h.
	B. Electives	4-7	s.h.
III.	Specialization Courses	11-20	s.h.
	A. Required of all candidates (except students who elect Grad. 600.) Music 603—Seminar in Research in Music Education	2	s.h.
	B. The following courses will be elected by the candidate subject to	2005082	1 of

# GRADUATE STUDY

# Music Methods

the Graduate Adviser:

Music 520A. Problems of Materials of Instrumental Music	2 sh
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MUSIC ,	
Music520B.Problems and Materials of Choral Music2 sMusic521A.Classroom Methods: Piano2 sMusic521B.Classroom Methods: Brass2 sMusic521C.Classroom Methods: Woodwinds2 sMusic521D.Classroom Methods: Strings2 sMusic521E.Classroom Methods: Percussion2 sMusic521F.Classroom Methods: Vocal2 s	.h. .h. .h.
History and Literature	
Music 406.Modern Music2 sMusic 407.Development of the Opera2 sMusic 413.Masters of the Symphony2 sMusic 424.Survey of Wind Instrument Music2 s	.h.
Theory and Harmony	
Music 417. Theory of Sound2 sMusic 511. Aural Theory2 sMusic 512. Advanced Aural Theory (Prerequisite: Music 511)2 sMusic 513. Composition (Prerequisite: Music 511)2 sMusic 516. Advanced Instrumentation (Prerequisite: Music 511)2 s	.h. .h.
(Note: Candidates who pass, by examination Music 511 Aural Theory, may ta Music 512 Advanced Theory)	.ke
Skills	
*Music 503A. Applied Music I: Primary Instrument 2 s *Music 503B. Applied Music II: Primary Instrument 2 s *Music 510A. Applied Music I: Secondary Instrument 1 s *Music 510B. Applied Music II: Secondary Instrument 1 s Music 530. Advanced Conducting 2 s	.h. .h.
*See Special Tuition Charges For Applied Music Study	
Research	
Graduate 600 Master's Thesis	

# Special Tuition Charges For Applied Music Study

Instruction in applied music (Mus. 503A, 503B, 510A, 510B) is on an individual basis and a special fee is charged in addition to the regular college fees and tuition. Students registering in a one semester-hour course pay an additional \$75.00 and those in a two semester-hour course, \$150.00 for private instruction.

Before registering in applied music consult with the Graduate Advisor for the Music Department.

## **GRADUATE COURSES**

# Music 503A. Applied Music I: Primary Instrument 2 s

Advanced study in a familiar medium for the serious and accomplished student. The course will be adapted to the musical and technical needs of the individual with opportunities available for recital performances. Fifteen one-hour lessons, private instruction. Admission by examination only.

# Music 503B. Applied Music II: Primary Instrument 2 s.h.

A continuation of Music 503A.

# Music 510A. Applied Music I: Secondary Instrument 1 s.h.

An elementary course, both for the beginner and for the student with limited background. Fifteen half-hour lessons per semester, private instruction. Admittance by audition.

# Music 510B. Applied Music II: Secondary Instrument

A continuation of Music 510A.

Music 511. Aural Theory

2 s.h.

Review of diatonic harmony (figured bass, triads, sevenths and ninth chords in all inversions, modulation, etc.) through extensive dictation, sight singing, harmonization, analysis, and creative use of materials.

#### Music 512. Advanced Aural Theory

2 s.h.

Chromatic harmony presented as a continuation of Music 511. Altered chords as found in the music of Bach, Beethoven, Brahms, and Tchaikovsky. Included are dictation, sight singing, harmonization, analysis and creative writing. Prerequisite: Music 511 or equivalent.

Music 513. Composition

2 s.h.

Practice in the writing of variations, small forms, songs, and music for small ensembles. Analysis and workshop performance are included. Prerequisite: Music 511 or its equivalent.

#### Music 516. Advanced Instrumentation

2 s.h.

A workshop course in instrumentation as applied to both orchestra and band. Principles of *Tutti* instrumentation as applied to both media. Scoring for smaller ensembles. Study of instruments, instrumental families and their possibilities and best uses. Direct instrumental setting of school, songs, hymns, etc., without the writing of a score. Elements of band military march construction and scoring. Every student will hear at least one of his instrumentations played by the college orchestra or band. Prerequisite: Music 511 or equivalent.

#### Music 520A. Problems and Materials of Instrumental Music

2 s.h.

This course aims to (1) evaluate teaching experiences, (2) develop an understanding of the problems of the instrumental organization in the school, (3) develop additional knowledge and understandings of the literature for orchestra, band, and a variety of small ensembles at all levels.

#### Music 520B. Problems and Materials of Choral Music

2 s.h.

This course provides a survey of the choral repertoire for accompanied and a cappella groups, for changed, unchanged, changing, and mixed voices. The course includes historical and stylistic characteristics of the choral repertoire. Materials for small groups, as well as large ones, are analyzed for performance value. Criteria for evaluating available materials, program building for all school needs, including holidays, festivals, radio and television performances are an integral part of the course. The members of the class comprise a laboratory chorus for the study of the repertoire.

#### Music 521. Classroom Methods

2 s.h. each

Elementary and Secondary classroom methods in the various media; the course deals with the principles, materials and methods used in teaching class instrumental and vocal music. Especially designed for teachers seeking new ideas in teaching basic principles of the various instruments, including voice.

521A. Piano

521B. Brass Instruments

521C. Woodwind Instruments

521D. Stringed Instruments

521E. Percussion Instruments

521F. Vocal Classes

# Music 530. Advanced Conducting

2 s.h.

A course in basic conducting practice with emphasis on the practical problems of public school instrumental work. Technique of the baton, clef reading and simple score playing at the piano, transposition, score reading, technique of rehearsal and drilling, conducting of instrumental ensemble accompaniments. Prerequisite: A college course in instrumental or vocal conducting or its equivalent in practical experience satisfactory to the instructors.

education field. Prerequisites: Matriculation for M.A. degree, Educ. 503, or concurrently registered in Educ. 503.

#### Graduate 600. Master's Thesis

4 s.h.

#### Music 603. Seminar in Music Education

2 s.h.

This course is designated primarily to provide an opportunity for graduate students in music education to investigate and apply the techniques of research in the music

# SENIOR-GRADUATE COURSES

# Music 406. Modern Music

2 s.h.

This course is planned to acquaint the student with contemporary music and is a continuation of Music 208. It includes a study of the Music of Debussy, Stravinsky, Schoenberg, Berg, Bartok, Hindemith, etc. Students are expected to compose short pieces in contemporary idioms. Prerequisite: a college course in music history or its equivalent satisfactory to the instructor.

#### Music 407. Development of the Opera

2 s.h.

This course deals with the origin, development, and the characteristics of Opera in the Italian, French, German, and Russian schools. Class analyses are made of representative Operas of these schools. Special attention is given to building an ear repertory of operatic music heard over the radio.

#### Music 413. Masters of the Symphony

2 s.h.

This course helps to provide the student with an understanding and appreciation of the classic and romantic symphony through the study of the symphonies of Haydn, Mozart, Beethoven, Schubert, Schumann, Tchaikovsky, and Brahms. Class analyses, including the reading of scores, are made of representative symphonies.

# Music 417. Theory of Sound

2 s.h.

The phenomena of sound as related to hearing, to music theory, to musical instruments, to the reproduction of music (phonograph, etc.) and to the conditions under which music is heard.

# Music 424. A Survey of Wind Instrument Music

2 s.h

This course includes music for full band, small ensembles, and solos with emphasis on literature available for brass and woodwind players in the elementary and the high school. A laboratory band as well as numerous small ensemble groups are formed by members of the class so that performance of all music under consideration is possible. Special attention is given the music originally composed for wind instruments. New music from all publishers is available for examination and evaluation.

# DEPARTMENT OF SCIENCE

Graduate Advisor: DR. JOSEPH F. BICKER

The graduate program of the Science Department is designed to help the science teacher with the problem of maintaining his professional competence with respect to recent advances in the fields of science and science education.

Prior to matriculation in the Science Department for the Master of Arts degree the student should complete a subject matter background of at least twenty-four semester hours of college science. This undergraduate program must show breadth in the three areas of science, biology, chemistry, and physics, plus sufficient depth in at least one area to serve as a base for the graduate program be taken in the major area.

In cases where there is a weak undergraduate program in the major field, prerequisite courses, not for graduate credit, may be assigned. In general, the assignment of elective hours to the major area would compensate for deficiencies in depth of preparation while prerequisite courses would compensate for deficiencies in breadth.

The student's work program is prepared in cooperation with the science adviser.

Any changes in the student's work program are made only with the written approval of the science adviser.

# \*REQUIREMENTS FOR THE M.A. DEGREE IN SCIENCE

- I. General Education (see Master's Degree Program Patterns)

  6-12 s.h.

  II. Basic Professional Education (see Master's Degree Program Patterns)

  6-9 s.h.

  III. Specialization

  11-20 s.h.

  A. The candidate must complete the research requirement by one of the two procedures listed below:

  Sci. 505. Research Seminar in Science

  2 s.h.

  Grad. 600. Master's Thesis

  4 s.h.
  - B. The candidate must complete at least 2 four-semester hour courses from among the following:

Bio. 407, 408, 409, 410, 411, 415, 506, 509, 512, 510, 530, 531, 540. Chem. 407, 408, 411, 412, 508, 509, 510, 515. Phy. 402, 405, 406, 409, 411, 416, 417, 512, 515, 520.

Phy. 402, 405, 406, 409, 411, 416, 417, 512, 515, 520. Sci. 405, 421.

C. The candidate may elect not more than three semester-hours from among the following:

Bio. 501, Chem. 501, Phy. 501.

D. The candidate may elect not more than four semester-hours from among the following:

Bio. 412, 413, 414, 417, 418, 516. Chem. 413, 414, 511.

Phy. 410, 513.

Sci. 409, 410, 418.

Minimum: 32 s.h.

# GRADUATE COURSES IN BIOLOGY

# Biology 501. The Teaching of Biology in Secondary Schools 3 s.h.

This is a seminar and research course designed to give opportunity for study of the best methods and practices being used in the teaching of secondary school biology. Major topics of discussion are: aims of secondary school biology, course content, functions of textbooks, testing, laboratory exercises and demonstrations, and the collection and use of suitable and available laboratory materials. A study is made of recent research studies in the field of biology teaching. Prerequisite: 16 s.h. in biology.

<sup>\*</sup>Pending approval of the State Department of Education.

# Biology 506. Histology and Histological Technique

4 s.h.

This course includes a study of the microscopic anatomy of living forms in order to bring about the fuller appreciations of their structure and function. The structural characteristics of cells and their specialization according to function are considered as well as the organization of this basic unit into the tissues and organs of the intact form.

The study of histological preparations during the laboratory period gives the student an opportunity to learn the characteristics of each tissue and organ. Basic procedures for the preparation of tissue sections and permanent mounts are covered. Prerequisite: 8 s.h. in biology.

# Biology 509. Field Studies of Flowering Plants

4 s.h.

The emphasis of this course is placed upon the methods of identification of higher plants and the ecological factors affecting the growth and development of these plants. Plants in their winter conditions are considered first. As the season progresses, the emphasis changes from the identification of woody to herbaceous forms. Plant communities of various types are observed, and the factors influencing their development are discussed. Field trips are taken to such typical habitats as the Pine Barrens, and Troy Meadows. Prerequisite: General Botany.

# Biology 512. General Ecology

4 s.h.

This course considers basic ecological principles and concepts. The habitat approach is followed with appropriate field exercises in fresh water, marine and terrestrial ecology. Intra and interspecific relationships are stressed with all living members of the ecosystem. Practical applications of quantitative and qualitative methods will be stressed. Radioecology will be explored. In every case the role of man in relation to his environment will be central. Each student will choose a problem in either plant or animal ecology and do appropriate research in field and library and report on such activity. Prerequisites: General Botany, General Zoology, Plant Taxonomy or equivalent, some Physical Science.

#### Biology 516. Evolution

2 s.h.

Theories of biological variation, race, and species formation. The development of some of the major animal and plant groups in time and space. Prerequisite: Zoology and/or Botany.

#### Biology 520. Plant Physiology

4 s.h.

This course is designed to provide the students with an investigation into the physiology of plants. It will cover in depth those areas of plant growth, development, and reproduction covered generally in introductory courses as well as the new advances in plant physiology. Some of the topics included are water relations of plants, mineral nutrition, physiological significance of soils and soil moisture, photosynthesis, respiration, plant biosynthesis, and dynamics of growth. Prerequisites: Organic Chemistry, General Botany, or special permission of the instructor.

#### Biology 530. Animal Behavior

4 a b

How animals adjust and adapt to stimuli in their external and internal environment, the neuro-muscular and hormonal mechanisms involved, their ontogeny and phylogeny. Prerequisites: A year course in invertebrate and vertebrate zoology and an introductory course in general psychology.

# Biology 531. Comparative Human Anatomy

4 s.h.

A study of man's physical, physiological, and behavioral aspects in the framework, and by the methodological approach of, comparative anatomy. Prerequisite: A year course in general zoology and a course in human anatomy and physiology.

#### Biology 540. Parasitology

4 s.h.

This course will consider the structure, life cycles and ecology of medically important protozoans, helminths and arthropods. Major emphasis will be placed on the biological relationships between parasite vector and human host. Laboratory work will consist of identification with the use of keys, dissection, examination and preparation of appropriate collections and slides. Prerequisite: General Zoology.

# SENIOR-GRADUATE COURSES IN BIOLOGY

# Biology 407. Comparative Vertebrate Embryology

4 s.h.

A broad study of developmental anatomy is made with work on fish, amphibian, reptilian, bird and mammalian embryos. The student makes slides of chick embryos. The modern experimental approach to embryology is reviewed and implications of

a genetic nature are explored. Prerequisite: 8 s.hrs. of work in zoology.

# Biology 408. Biological Technique

4 s.h.

The opportunity is given to gain experience in the use of equipment, supplies, and tcaching aids so essential to the operation of a successful laboratory and class. Emphasis is also placed upon the collecting and preserving of plant and animal material. The laboratory is devoted to the working out of individual and group experiments and demonstrations. A considerable library of techniques is developed. Prerequisite: 8 s.hrs. in zoology and 4 s.hrs. in botany.

# Biology 409. Human Physiology

4 s.h.

A study is made of both cellular and general aspects of human physiology based upon a previous study of mammalian anatomy and histology. Laboratory sessions closely coincide with concepts discussed during lecture sessions. Prerequisite: A course in vertebrate anatomy or Biology 402.

# Biology 410. Comparative Anatomy of the Vertebrata

4 s.h.

Representative members of the phylum chordata are studied by means of dissections and demonstrations. The prochordata are considered briefly. Fundamental principles of taxonomy, anatomy, physiology, and ecology are reviewed and amplified. This course should enrich the background of those interested in vertebrate forms and be of value for those interested in man and his place in the world. Prerequisite: 8 s.hrs. of work in zoology.

# Biology 411. Bacteriology

4 s.h.

General biological phenomena are demonstrated by microbial life by means of laboratory experimentation with bacteria and other micro-organisms. Major topics include: history of microbiology, classification, morphology, metabolism and ecology. Emphasis is placed upon the economic importance and the relationship of microorganisms to human welfare, health, and disease. Specific laboratory techniques and procedures are developed in the course. Prerequisites: General Botany, General Zoology, and inorganic and organic chemistry.

#### Biology 412. Genetics

2 s.h.

The basic facts, principles, and theories of variation and heredity as illustrated in microorganisms, higher plants, animals, and man are considered. Modern cytological, embryological, developmental and statistical approaches are developed. The newer concepts of the gene, mutation, and gene action are considered. Practical exercises are used to illustrate the principles. Prerequisite: Elementary biology of collegiate grade and/or permission of the instructor.

#### Biology 413. Economic Botany

2 ch

The consideration of the importance of plants and plant life to the world in general and to man in particular is the principal aim of this course. The economic importance of bacteria, fungi, and other lower plants is considered, as well as that of the seed plants.

#### Biology 414. Field Ornithology

2 s.h.

New Jersey is one of the best areas in the East for the study of birds. On the Montclair campus alone, over 130 species have been observed. This course deals primarily with the identification and natural history of birds. A variety of habitats are visited so that one may become acquainted with the habits and requirements of this unusually well-adapted vertebrate type. Migration, methods of attracting and protecting birds, the value of birds, and related topics are also considered. Prerequisite: A year of biology or the equivalent.

# Biology 417, 418. Modern Biology I and II

4 s.h. each

This course meets the needs of in-service teachers who require training in the new approaches to biological knowledge. Cellular biology, biochemistry, evolution and

genetics, and the plant and animal community comprise the five general areas to be stressed. Specialists present the data and indicate the implications for man. Visiting lecturers and field trips contribute to the experiences of the students. All participants must be in-service biology teachers in a secondary school.

# GRADUATE COURSES IN CHEMISTRY

# Chemistry 501. The Teaching of Chemistry in Secondary Schools

3 s.h.

A study is made of the objectives, recent trends, methods of presentation, courses of study, lesson planning, instructional aids, and subject matter of high school chemistry. Prerequisite: 16 s.h. in chemistry

#### Chemistry 508. Biochemistry

4 s.h.

In this course a study is made of the composition of living organisms, their nutritional requirements, their mechanism for promoting and regulating chemical action, and their metabolism of foods. A laboratory study is made of the components of foods, enzyme action, isolation of proteins, etc., blood and urine analysis. Prerequisite: Organic Chemistry.

#### Chemistry 509. Advanced Inorganic Chemistry

4 s.h.

This course offers opportunity for intensive and systematic study of the elements in the light of the periodic classification. Selected theories and principles of inorganic chemistry and some of their applications are studied in detail. A study is made of types of compounds. Directed use of chemical literature is an important part of this course. Individual experimental work in the laboratory consists chiefly of preparation and purification of inorganic compounds and testing for impurities in the products. Prerequisite: General college chemistry.

#### Chemistry 510. Food Inspection and Analysis

4 s.h.

A study is made of the composition of commercial food products, the laws governing purity and marketing of foods, methods of analysis of food. Laboratory work is an extension of chemical and microscopic analysis to provide application of various analytical methods. Methods of extraction; detection of adulterants, preservatives, coloring; estimation of carbohydrates, fats, proteins, minerals, and vitamins are included in the laboratory work of the course. Prerequisites: Organic chemistry and quantitative analysis.

#### Chemistry 511. Advanced Biochemistry

2 s.h.

This course is designed to provide a continuum with the course Chemistry 508, Biochemistry. The more recent advances in biochemistry are studied. The course attempts to integrate the concepts of intermediate metabolism. Some of the topics included are: metabolism of biological compounds, electron transport and oxidative phosphorylation, integration of carbohydrate, lipid, and protein metabolism, photosynthesis, the nitrogen cycle, and biochemical genetics. Prerequisites: General College Chemistry; Organic Chemistry; Chemistry 508, Biochemistry, or equivalent; or special permission of the instructor.

# Chemistry 515. Advanced Organic Chemistry: Qualitative Organic Analysis 4 s.h.

The primary aim of this course is to acquaint the student with the methods of identification of unknown organic substances. The value, and difference between this and many other laboratory courses, is that as yet no scheme has been devised which reduces the course to the mere following of directions. At every step in the analysis, the student is required to exercise his own judgment. He must rely on his own faculties for observation and originality in planning his work in order to attain a complete and successful characterization of an unknown organic compound. Prerequisite: Organic Chemistry.

# SENIOR-GRADUATE COURSES IN CHEMISTRY

# Chemistry 407. Advanced Quantitative Analysis

4 s.h.

This course is adapted to the needs of students. The student, after consultation with the instructor, may select analyses from the following: general or special types of oxidation-reduction; gravimetric methods; colormetric methods; use of organic reagents in analyses; electrometric titrations, conductimetric titrations; spectographic methods of

analysis; electro-deposition of metals; and special methods of analysis. Prerequisites: General college physics and one semester of quantitative analysis, or permission of the instructor.

# Chemistry 408A. Industrial Chemistry, Part I

2 s.h

The purpose is to enable science teachers to understand the type of chemical industries in the State of New Jersey and the nature of their problems. A survey is made by lectures, reports, and trips to plants of the chemical industries. This section of the course stresses the importance and the characteristics of chemical industry, the various unit operations used by the industry to carry out chemical reactions, the controls used to insure quality, the organization for research, and the type of workers employed. Prerequisites: General and organic chemistry, or permission of the instructor.

# Chemistry 408B. Industrial Chemistry, Part II

2 s.h.

This course is a study of the chemical industries of the metropolitan area utilizing the methods outlined in Chemistry 408A. Also, a study is made of the economics of chemical industry, chemistry, and industry in general, and the effects of chemical discoveries upon living conditions. Prerequisites: General and organic chemistry, or permission of the instructor.

# Chemistry 411. Physical Chemistry, Part I

4 s.h.

This course, the first half of a year's work in physical chemistry, deals with gases, liquids, crystals, physical properties and electrolytes, colloids, thermo-chemistry, and homogeneous and hetergeneous equilibria. Prerequisites: General college chemistry, analytical chemistry, and general college physics.

#### Chemistry 412. Physical Chemistry, Part II

4 s.h.

This course deals with electrical conductance, electrolytic equilibrium, electromotive force, electrolysis, polarization, chemical kinetics, photochemical reactions, atomic structure, molecular structure, and radioactivity. Prerequisites: General college chemistry, analytical chemistry, and general college physics.

#### Chemistry 413. Atomic Structure and Atomic Energy

2 s.h.

This is a course designed to familiarize the student with a modern conception of the tructure of matter and to acquaint him with some significant aspects of atomic energy. Some of the topics: discoveries leading to knowledge of the structure of the atom; isotopes; nuclear fission; nuclear reactions; radio-active isotopes in agricultural, biological, and chemical research; and availability of materials. Prerequisites: General college chemistry and general college physics, or special permission of the instructor

#### Chemistry 414. Introduction to Radiochemistry

2 s.h

This course is an introduction to the use of radioisotope experiments for the chemistry curriculum. The course consists of lecture and laboratory work which covers such topics as detection instruments counting techniques, sample preparation, radiochemical separations by co-precipitation, chelation, and ion-exchange techniques. Prerequisites: General college chemistry, general college physics, or permission of the instructor.

# GRADUATE COURSES IN PHYSICS

# Physics 501. The Teaching of Physics in Secondary Schools

3 s.h.

A study is made of the objectives, methods, and techniques of presentation, courses of study, lesson planning, instructional aids. and subject matter of high-school physics. Attention is given to the recent trends in developing apparatus and other equipment suitable for teaching the principles of physics. Assignments are made from recent literature on the outcomes of teaching of physics by television and by other visual aids. Prerequisite: 16 s.h. in physics.

# Physics 512. Modern Physics

4 s.h

This course is a survey of recent experimental research in physics and of the newer theories concerning nuclear physics and electricity. Such topics as atomic spectra, radio activity, artificial transmutation of the elements, and cosmic rays are discussed. Prerequisites: General college physics, general college chemistry, and a course in electrical measurements.

(No credit is given for Phy. 512 if student has taken Phy. 415.)

# Physics 513. Nuclear Radiation

2 s.h.

A study of the nature of radiations is made. Particular attention is given to radiation measurement technique. The course is concluded with a study of health physics as related to radiation dosages and their effects. Some attention is paid to disposal of radioactive wastes, radiation protection, and safety precautions. Prerequisites: General college physics, general college chemistry, and a course in electrical measurements.

#### Physics 515. Fields and Waves

4 s.h.

Intended as a terminal course in physics. Portions of all the undergraduate and graduate courses are utilized to present an overall view of the "state of the art." The philosophy and most advanced research in modern day physics are combined to present a unified view of the physicist's present interpretation of the world about us. Prerequisites: Modern Physics, Introduction to Analytical Mechanics, Nuclear Physics, and a year of Integral and Differential Calculus.

#### Physics 520. Selected Topics in Physics

4 s.h.

This course is designed to acquaint physical science teachers with recent developments in physics. Topics considered will vary. Illustrative examples are: Mossbauer effect, lasers and masers, nuclear and electron resonance, topics from astro-physics, low and high temperature physics. Laboratory work is not required. Prerequisites: Phy. 101, 102, 402.

# SENIOR-GRADUATE COURSES IN PHYSICS

# Physics 402. Magnetism and Electricity

4 s.h.

The purposes of the course are: (1) to provide a background of training in the fundamental laws and principles governing the generation and use of electricity; (2) to develop skill in manipulating laboratory and demonstration apparatus; and (3) to learn the basic principles of alternating current circuits.

Laboratory experiments with modern electrical instruments are employed to verify the Maxwell equations. Some of the topics studied are: modern concepts of the electronic structure of matter, electrical forces, magnetic fields, potential, resistance, impedance, capacitance, and time constants. Prerequisite: General College Physics.

#### Physics 405. Light and Optical Instruments

4 s.h.

Topics included for study in the classroom and laboratory are: the propagation of light; emission and absorption of radiant energy; reflection, refraction, polarization; spectrum analysis; photometric measurements; photoelectric cells; measurement of high temperatures; characteristics of illumination, modern illuminants; and industrial and domestic uses of light. Prerequisites: General college physics and a course in electrical measurements.

#### Physics 406. Astronomy

4 s.h.

This course is designed to acquaint the student with the celestial sphere, celestial motions, and the phenomena associated therewith; to make him aware of the principles of astronomy. It consists of a survey of the solar system, practical problems in locating and identifying celestial bodies, a consideration of light and matter, the basic laws of motion, the physical-chemical properties of the sun and stars, stellar scales and maps, the measurement of distance, the cosmology of the universe, the history of astronomical concepts, and the regularities, irregularities, and evolution of the solar system. Prerequisites: General college physics and chemistry.

#### Physics 409. Basic Electronics

4 s.h.

An introductory course in basic electronic phenomena covering such topics as elementary circuit theory, electron emission, vacuum tube and transistor characteristics, non-linear circuit elements, gaseous discharge, and the use of transistors. Applications of electronics to instrumentation, servo-mechanisms, radio, and television are introduced. Prerequisites: General college physics, and a course in magnetism and electricity.

#### Physics 410. Meteorology

2 s.h.

This course develops a fuller appreciation of our atmosphere with emphasis on meteorological applications of physical principles. Consideration is given to weather elements; temperature effects; air currents, air masses, and fronts; the collection, dis-

semination, and interpretation of weather data; and the general applications of meteorology. The student is expected to learn to use meteorological instrumentation, and emphasis is placed upon the improvisation of apparatus and equipment. Prerequisite: General college physics.

# Physics 411. Photography

4 s.h.

This course consists of laboratory work and field work supplemented by lectures and demonstrations. Emphasis is placed on physical principles in the construction of cameras, projection printers, tanks, and filters. Special attention is given to chemical principles in the development of films and paper, toning, intensification, and reduction. Prerequisites: General college physics and general college chemistry or permission of the instructor.

#### Physics 415. Introduction to Modern Physics

4 s.h.

This course is designed to give the student a general view of the important advances in physics during the past fifty years. In the first part of the course considerable time is spent in the study of electron theory. Some of the topics considered are: the hydrogen atom, optical and X-day spectra, natural radioactivity, cosmic ray, nuclear fission, new elements and isotopes, and particle accelerators. Some laboratory work is required. Prerequisites: General college physics, general college chemistry, and a course in electrical measurements.

# Physics 416. Introduction to Analytic Mechanics

4 s.h.

This course includes some treatment of the physics of classical mechanics, of the kinematics and dynamics of particles, and the dynamics of rigid bodies. Mathematical methods of handling data and theory are introduced and developed. The course consists of lectures, discussions, demonstrations of practical application, and problem solving. There are two hours of lecture-recitation and four hours of laboratory work per week. Prerequisite: General college physics. Recommended: 1 year of calculus.

#### Physics 417. Nuclear Physics

4 s.h.

Nuclear Physics is a one-semester course, including laboratory work, which is designed to provide a foundation in the area of nuclear physics for physical science majors and minors. Some topics considered in the course: static properties of nuclei, detectors, nuclear reactions, forces and models. Prerequisites: Phys. 101, 102, 402.

# GRADUATE COURSES IN SCIENCE

#### Science 505. Research Seminar in Science

2 s.h.

This course is designed to afford opportunity for graduate students in science, supervisors, and science teachers: (1) to investigate research in science education; (2) to organize science experiences and science information with the teaching materials for the public schools. Each member of the group selects a project. This project must be presented to the science faculty and graduate students for evaluation. Prerequisites: Matriculation for M.A. degree in science, registered concurrently for Educ. 503, or permission of the instructor.

#### SENIOR-GRADUATE COURSES IN SCIENCE

#### Science 405. Field and Laboratory Studies in Science

4 s.h.

This integrated course is designed to show the relationship in the geological rock formations, the types of soil, water patterns, plant communities, and animal inhabitants in northern New Jersey, and the effects on human occupations. The field trips are for the purpose of gathering data and materials for intensive work in the laboratory. The experiments are designed to give the student acquaintance with the science of common but possibly unstudied features of the landscape; e.g., soils are reproduced in profile and examined microscopically, physically, and chemically; water from a variety of sources is tested for biological and chemical impurities; the census of plant and animal inhabitants of typical areas is associated with relevant factors in the environment. Discussions precede and follow the field and laboratory work to establish the probable history of the area and to suggest the probable trend, whether advancing or retrogressing, of its development. Stress is placed on the kinds of human control in specific communities which would best serve their progress.

Students are asked to submit an analysis of the geological and biological features of some known community, based on the skills and principles learned. Some other objectives of the course include an understanding of the organization of school museums for learning purposes, the making of ecological maps and illustrating them with photographs and diagrams, and the techniques of ecological field trips. Two instructors, a chemist and a biologist, collaborate in giving this course. Prerequisite: Proficiency in biology and chemistry.

#### Science 409. Senior-High-School Physical Science Demonstrations 2 s.h.

This course furnishes teachers of the physical sciences with demonstrations and experiments designed for work in high-school chemistry, physics, and applied physical science courses. A detailed study of demonstrations is made with emphasis on visibility and avoidance of failure. Emphasis is placed on sources of new demonstrations.

# Science 410. Junior-High-School Science Demonstrations 4 s.h.

This course covers the methods of experimental instruction appropriate to grades seven, eight, and nine. A detailed study is made of demonstrations for general science at their levels.

#### Science 411. Problems in Field Studies in Science

2 s.h.

In this course each student selects a phase of field science in which he does advanced research under the guidance of the instructor. Plant ecology, bird-life, pond life, fungi, tree diseases, and insect life are a few of the areas from which the student may choose. Prerequisites: Science 412, Field Studies in Science, or its equivalent, plus at least 12 s.h. of biology.

#### Science 412. Field Studies in Science: Biological

2 s.h.

Extensive instruction in the identification and natural history of fauna and flora is given in this course. Students examine the ecology of plant and animal communities (terrestrial and aquatic) and relate such communities with man's use of natural resources. The relation of field activities to present school curricula is considered. No previous science courses are required.

#### Science 413. Field Studies in Science: Physical

2 s.h.

Emphasis in this course is given to local and New Jersey geology, minerals, soils, and waters, with emphasis on the chemical and physical aspects of soil and water. Field trips are taken through the Kittatinny Mountains and to the Delaware Water Gap.

# Science 414. Conservation of Plants and Animals

2 s.h.

The social, economic, and ecological implications of plant and animal conservation are considered together in this course. Discussion periods are interspersed with field trips to forest and wildlife management areas. Cooperating experts from state and federal agencies bring special contributions in their fields. Visual aids are used extensively.

#### Science 415. Conservation of Soil and Water

2 s.h

The social, economic, and ecological implications of soil and water conservation are considered together in this course. Discussion periods are interspersed with field trips to selected areas. Outside experts bring special contributions in their fields. Visual aids are used extensively.

# Science 418. Three Centuries of Science Progress

2 s.h.

This course includes a study of fundamental world changes that have resulted in the past three hundred years from scientific discoveries. Topics considered are the following: a background of the beliefs and practices of the age; the processes of thought which produced skepticism; the experiments devised to disprove ruling opinions; the new concepts arising from fresh evidence; and the social, economic, and philosophic adjustments following the discoveries.

Stress is given to the nature of scientific inquiry, its cumulative nature, its desire for freedom, and how to judge the probable fruitfulness of a research problem. The role the man of science occupies in the world today is contrasted with his counterpart in earlier centuries. Demonstrations of historical experiments, readings in the original literature, and lectures and discussions are employed.

#### Science 419. Field Science and Conservation

2 s.h.

In this course students study phases of field science which are related to conservation. The components of soil and water which produce good crops are studied. Students gain an understanding of farm practices by visiting several nearby farms. Forest and wood-lot management, wildlife preservation, mineral resources use, and other important areas in which science influences the conservation of natural resources are investigated.

# Science 420. Water Supply and Conservation Problems

This course is designed to provide students with an opportunity to do an extensive study of the water supply problems in New Jersey and surrounding states. A study of water tables, rainfall, irrigation, drainage, flooding, water-shed management, stream pollution, and soil erosion, gives students a background for understanding the problems involved in domestic and industrial use of water. State and regional water conservation projects such as Incodel, Passaic Valley Flood Control, and Stoney Brook Water-shed are studied. Teaching materials are supplied, and methods of presenting this material to elementary and secondary pupils are demonstrated and discussed.

#### Science 422. Consumer Science

2 s.h.

The purpose and organization of this course are to acquaint the consumer with the aspects of science in everyday life. Basic scientific principles are developed in the process of testing and evaluating consumer products. Field trips are taken to local industries and public utilities to evaluate processes as well as products. A laboratory testing program deals with commercial products from household appliances to foodstuffs and fertilizers. A testing and instructional program is also developed with a local industry. The course is included as a general education offering at the graduate level and is not intended as a course for majors in this department.

# DEPARTMENT OF SOCIAL STUDIES

Graduate Advisor: Dr. BERTHA QUINTANA

The teacher of social studies works in a field the boundaries of which are constantly changing and expanding. The necessity for constant study, especially with regard to the contemporary social situation and its problems, presses upon every secondary school teacher of the social studies. The Social Studies Department at Montclair intends to provide for such teachers courses of an advanced character which will help to keep them abreast of the changes in a changing society and a complex world. It also provides advanced courses for those teachers who wish to increase their preparedness in specialized secondary school subjects. Finally, it aims to provide for the teacher-in-service an opportunity for keeping informed concerning the changing techniques and problems of teaching the social studies. Selections from advanced courses of the sort just described lead to the Master's degree in the social studies.

#### \*REQUIREMENTS FOR M.A. DEGREE IN SOCIAL STUDIES

In addition to the general requirements for admission to the graduate program at Montclair, a candidate for the degree of Master of Arts in Social Studies must present an undergraduate major in social studies of at least twenty-four (24) semester hours.

- I. General Education (see Master's Degree Program Patterns)
- 6-12 s.h.
- II. Basic Professional Education (see Master's Degree Program Patterns)
- 6-9 s.h.

III. Specialization

- 11-20 s.h.
- A. To increase the candidate's competence as a teacher, each student will take a minimum of eleven (11) and a maximum of twenty (20) semester hours in courses offered by the Social Studies Department. It is recommended that students develop a concentration by electing at least half of their specilization requirement in one of the following areas of study associated with the social studies:
  - 1. American History
  - 2. European History
  - 3. Anthropology
  - 4. Economics
  - 5. Political Science
  - 6. Sociology
  - 7. Non-Western Culture
  - 8. Curriculum

At times two or more of these areas may be combined to make up such a concentration. The balance of the student's program will be made up of electives in other areas and related major fields.

# B. Research Requirement

- 1. One course in each of the areas of concentration will be required of those electing to do their research project in that area. This course will emphasize the research methodology peculiar to its specific fields of inquiry.
- In addition to the research course (Educ. 503) required of candidates in all departments, those majoring in Social Studies will take Social Studies 603: Seminar in Social Studies Research.

#### C. Comprehensive Examination

All candidates will take part in a final integrative experience consisting of a three (3) hour written examination structured to cover:

- 1. Subject of research project
- 2. Selected area of concentration
- 3. Current trends in social education

Minimum: 32 s.h.

<sup>\*</sup>Pending approval of the tate Department of Education.

# GRADUATE COURSES IN SOCIAL STUDIES

# Social Studies 501. Modern Social Studies Instruction and Supervision 2 s.h.

This course is designed to assist teachers, administrators, and supervisors to obtain a comprehensive view of recent curriculum trends in social studies. While primary emphasis will be on development in the secondary school, this aspect will be considered in relation to the total K through 12 program. Consideration will also be given to the problems of administration and supervision as they relate to the pupil, teacher, administrator and supervisor.

# Social Studies 502. New Materials for the Social Studies 2 s.h.

A study of the sources, selection and evaluation of new materials for the improvement of social studies instruction form the major part of this course. Teachers and administrators concerned with the development of effective social studies programs can become acquainted with the very latest material and equipment available.

# Social Studies 511. American Colonial History, 1492-1776 2 s.h.

A study of European colonial activity in the New World with particular emphasis on the areas which now constitute the United States. Political, social, economic, and intellectual developments receive attention.

# Social Studies 512. Origin and Development of the Constitution, 1619-1835

This course is an intensive study of the origin and framing of the Constitution of the United States. It aims to search out the roots and influences that determined our basic political institutions. The seminar method is employed and attention is given to the techniques of historical research and historical writing as it applies to the early period in American history.

#### Social Studies 513. The American Revolution and the Early Republic, 1763-1828

Study and analysis of the courses and events of the Revolution, the establishment and growth of domestic institutions under the Constitution, and the development of foreign policy.

#### Social Studies 514. The Middle Period in American History, 1828-1876 2 s.h.

A study of the significant events and developments of this period of our history, including attention to Jacksonian democracy, westward expansion, sectionalism, the Civil War, and Reconstruction.

# Social Studies 515. America in Transition, 1865-1917 2 s.h.

A study of the forces which contributed to the development of the modern industrialized America, the changing nature of American society, and the reactions to the changes which took place in the period.

#### Social Studies 516. Recent American History, 1914 to the Present 2 s.h.

Main emphasis will be on the continuing reactions to the problems of an industrialized America, and on America's activities and role as a world power. The period studied is from c. 1914 to the present. The seminar method is used and attention is given to the techniques of historical research and historical writing as it applies to the later period in American history.

#### Social Studies 521. History of Political Thought 2 s.h.

The major theories of representative political philosophers concerning the nature, functions, organization and sovereignty of the state are studied in this course. Among those discussed are: Plato, Aristotle, Cicero, Thomas Aquinas, Machiavelli, Luther, Calvin, Bodin, Hobbes, Locke, Spinoza, Montesquieu, Rousseau, Hume, Bentham, J. S. Mill, Burke, Hegel, Marx.

#### Social Studies 522. Great Britain and the Commonwealth 2 s.h.

A study is made of the origins, membership and working institutions of the British Commonwealth of Nations. Special attention is given to problems of the Commonwealth since 1945, in the light of Britain's altered position in international affairs and the development in Europe of regional economic organizations.

#### Social Studies 523. Modern France

2 s.h.

This course studies the development of modern France from 1789 to the present. Emphasis is placed upon political, social and economic conditions and trends from the Revolution and Napoleon through the Restoration, Second Empire, Third and Fourth Republics to the establishment in 1958 of the Fifth Republic by Charles de Gaulle

#### Social Studies 524. Contemporary Europe

2 s.h.

The period between the wars (1919-39) is reviewed, and analyses are made of the origins of World War II and the peace settlement of 1945-47. Emphasis is then placed upon developments in the postwar period, including the reconstruction of Germany, the changeover in France from the Fourth to the Fifth Republic, Britain's continuing economic crisis, and problems of the states of eastern Europe. Special consideration is given to the movement for political and economic integration of European states.

#### Social Studies 525. Russia in the Modern World

2 s.h.

Particular attention is devoted to the institutional apparatus of the Soviet system with emphasis given to the special functions performed by such agencies as the press, the schools, and the agricultural collective. The role of the Communist Party and its relation to other political and economic forces within the nation are discussed. In appraising the development of Soviet foreign policy, the emergence of Soviet interests in the Far East, the Middle East, and Africa are considered.

#### Social Studies 531. Living Races

2 s.h.

The physical anthropology of race: human origins; racial revolution; and racial types in the modern world. The facts of race are utilized as the basis for studying race relations in contemporary society, as well as for clarifying misconceptions concerning race and intelligence, race and culture.

# Social Studies 532. Applied Anthropology

2 s.h.

This course considers the selection and application of anthropological data for dealing with problems of contemporary life. Emphasis is placed on anthropological method, early problems of application, and the relevance today of anthropological knowledge in the professions. (Prerequiste: Social Studies 431 or 432. Required for Anthropology concentration.)

#### Social Studies 533. Spanish Culture in the U.S. Today

2 s.h.

This course deals with the cultural heritage of Spanish-speaking America. Utilizing anthropological concepts, problems of adjustment and educational implications are emphasized.

#### Social Studies 534. Anthropology and Education

2 s.h.

An advanced seminar dealing with the relationship of anthropology to education. Group work and guided individual research centering on the use of anthropological data in our schools. Prerequisites: 6 credits in anthropology, or by permission of the instructor.

# Social Studies 541. Foundations of Contemporary Economic Thought 2 s.h.

The objectives of this course are: (1) to study the antecedents of current economic theory; (2) to analyze economics as a cumulative science through examination of the works of the creative economists; (3) to foster an understanding of the uses and limitations of economic theory.

#### Social Studies 542. Economic Stability

2 s.h.

The objectives of this course are: (1) to study the determinants of stability and growth; (2) to analyze policies available to developed and developing nations that deal with instability and stagnation; (3) to foster an understanding of the issues involved in efforts to avoid insecurity and promote economic growth.

#### Social Studies 543. U.S. in the World Economy

2 s.h.

The objectives of this course are: (1) to study the theory and institutions of American foreign trade; (2) to analyze the alternatives available to the American people; (3) to foster an understanding of the problem of American foreign conomic policies.

# Social Studies 544. Government and Business

2 s.h.

The objectives of this course are: (1) to study the evolution of governmental influences on the functioning of the American economy; (2) to analyze the causes and consequences of government regulation and control; (3) to foster an understanding of the relationship between economic analysis and public policies.

#### Social Studies 551. Constitutional Law

2 s.h.

A study of the development of the Constitution and the Supreme Court of the United States illustrated through reference to court opinions as expressed in selected Supreme Court cases. Areas to be included are: the federal system; human rights; executive, judicial and legislative powers; and interstate commerce.

# Social Studies 552. The President and Congress

2 s.h.

The course concentrates attention on the organization, structure and powers of the national executive and legislative branches of government. Special emphasis will be placed on executive-legislative relationships, the nature and functioning of the legislative process, and the respective roles of the President and Congress in the formulation of public policy in a modern democracy.

#### Social Studies 553. The Federal Courts

2 s.h.

This course concentrates attention on the structure of the federal courts and the manner in which they function. Comparisons and contrasts are drawn between the national and the state judicial systems and the body of law which they interpret. Special attention is given to the role of the Supreme Court, both as arbiter of federal-state relations and as a restraint on executive and legislative authority. Some of the major decisions of the Supreme Court are examined in tracing the changes in judicial outlook and interpretation.

#### Social Studies 554. American Political Thought

2 s.h.

This course deals with contemporary trends and theories as they have emerged from social and economic conditions and as they are founded upon the bases laid down by Hamilton, Madison, Washington, Jefferson, Marshall, Calhoun, Webster, Lincoln, and Wilson.

#### Social Studies 561. Religion in America

2 s.h.

The study of the dynamics of religion in American society. Among the topics considered are contemporary trends in religious thought, religious social action, religious prejudice, and problems of church, state, and school in urban America.

#### Social Studies 562. Theory and Method in Social Work

2 s.h.

Emphasis in this course is placed on the development of social welfare norms, and on the methodology of contemporary social work. Attention is given to the historical development of social welfare concepts and legislation, and to current trends in the field. Prerequisite: 461 or 462. Required for Sociology concentration.

#### Social Studies 563. Social Movements

2 s.h.

A critical analysis of the development of social movements and their effects on social legislation in the 20th century. The dynamics of social movements in complex societies of the world are studied. Prerequisite: 562 or permission of instructor.

# Social Studies 564. Social Work and Education

2 s.h.

An advanced seminar dealing with the relationship of social work to professional education. The uses of selected techniques and concepts from the field of social work in contemporary education are emphasized. Students are encouraged to familiarize themselves with services offered by community social agencies to schools and educators. Prerequisites: 6 credits in Sociology, or by permission of the instructor.

#### Social Studies 601A, 601B, 601C. New Interpretations in History 2 s.h

Designed for the teacher with a special interest in history, the course examines important reappraisals of the great problems, personalities and periods of either (A) American history, (B) European history, (C) Non-Western history in the light of recent representative examples of historical writing and research.

# Social Studies 602A, 602B. Recent Trends in the Social Sciences

The teacher with a special interest in the social sciences can utilize this course to examine current trends in the fields of (A) anthropology and sociology, or (B) political

science and economics in terms of recent representative examples of professional writing and research.

# Social Studies 603. Social Studies Research Seminar 2 s.h.

This seminar course is designed primarily to provide an opportunity for graduate students in the social sciences to investigate and apply the techniques of research in the social studies field. Prerequisite: Education 503.

#### SENIOR-GRADUATE COURSES IN SOCIAL STUDIES

#### Social Studies 402. Comparative Government

2 s.h.

This course offers an opportunity to study the political systems of the major world powers. Attention is given to the political institutions of Great Britain, France, and the Soviet Union. In each instance, political institutions are viewed against their economic and social backgrounds. Frequent comparisons are drawn between the American federal government and the foreign government considered in this course.

# Social Studies 408. A History of New Jersey

2 s.h.

This course assists teachers in acquiring a better knowledge of their state. A study is made of the history of New Jersey from the point of view of the social, political, economic, and cultural development of the people from the beginning of the settlement to the present. Attention is given to the geographical and industrial aspects of the state and the place of New Jersey in the national setting.

#### Social Studies 410. Contemporary Africa

3 s.h.

This course is designed to give the background with which to develop an understanding of the social, political and economic trends of modern Africa.

#### Social Studies 412. International Government

2 s.h.

The attempts of the international community of states to express itself in a formal world organization are the subject of this course. The agencies which have been established to deal with international, legislative, executive, administrative, and judicial problems are studied, including the international courts of justice, League of Nations, and United Nations.

#### Social Studies 413. Economic History of the United States

? s.l

The great trends and movements in agriculture, finance, commerce, manufacturing, transportation, and industrial relations are traced from their beginnings in the colonial period to their contemporary expressions in the present crisis. This course supplements, but it does not duplicate, courses in the political history of the United States or courses in economic principles and problems.

#### Social Studies 425. Medieval Civilization

2 s.h.

This course examines the origins and development of Medieval civilization in Western Europe from the decline of Rome to about 1350. Study is made of the conversion of Europe to Christianity, monasticism, feudalism, and manorialism, the development of towns and trade, a powerful Church, dynastic monarchies, universities, art, literature and philosophy.

#### Social Studies 432. The Twentieth Century World

2 s.h.

This course is designed to emphasize a topical consideration of significant movements, events, and personalities of the Twentieth Century. Trends and topics to be studied include an historical background of the major political "isms" of the period. Considerable attention is given to specific contemporary problems facing the world, especially those emerging nations of Asia, Africa, and South America.

#### Social Studies 433. American Political Thought

2 s.1

This course deals with contemporary trends and theories as they have emerged from social and economic conditions and as they are founded upon the bases laid down by Hamilton, Madison, Washington, Jefferson, Marshall, Calhoun, Webster, Lincoln, and Wilson.

# Social Studies 435. The Development of Latin America

2 s.h.

This course deals with Latin America from the pre-Columbian era to the end of the wars of independence. Stress is placed upon the geographical background, and the development of the Maya, Inca and Aztec civilizations. After considering the Spanish

and Portugese backgrounds of the Latin-American people, consideration is given to the European cultures established in the New World. In dealing with the wars of independence in Latin America, comparisons are made with the American Revolution.

# Social Studies 437. The Political Party System in the United States 2 s.h.

The topics are: party organization, the political boss, the political machine, party finances, the process of voting, election laws, primaries, conventions, platforms, presidential elections, majority rule, the party system, sectional politics, the farm vote, the labor vote, and the future of party government in the United States.

# Social Studies 438. The Literature of American History 2 s.h.

The purpose is to familiarize the student with the writings and sources of United States history. Social, economic, political, geographic, and other interpretations are studied and compared. Writings of a group of representative American historians are examined. A general survey and evaluation are made of the primary and secondary sources available for the study of United States history.

#### Social Studies 440. Modern Latin America

3 s.h.

This course is designed to give an understanding of the economic, social, and political character of contemporary Latin-America. The history of these nations from their wars of independence to the present serves as background for the present state of affairs in this region. Students are given an opportunity to read works of Latin-American authors, to hear speakers from that area, and to see recent films.

## Social Studies 441. Economic History of Europe

2 s.h.

The study of Europe from an economic point of view is particularly important in the light of present European problems and their relation to world-wide conditions. This course is a survey of the economic life and development of Europe from the emergence of the ancient civilizations to the beginning of the modern economic world. It gives special attention to economic causes that underlie the dislocation and perplexities of the last century.

#### Social Studies 442. The Far East

3 s.h.

A study is made of the economic, social, and cultural situation of the Far East, with particular emphasis on the historical background of China and Japan, and of our relations with the Philippines. Oriental folkways, religion, education, population shifts, and strategic questions are discussed. This course provides an approach to the problems the United States must face in the Far East.

#### Social Studies 443. Youth and the Community

2 s.h.

This course is a sociological study of youth in its many relations to the community. Special attention is given to problems which arise in the relationship of youth and the community; e.g., juvenile delinquency, conditions contributing to maladjustment, poorly adjusted children, and educational and social agencies active in solving youth behavior. Through the study of concrete cases, special treatment and community research are demonstrated.

#### Social Studies 445A, 445B. Introduction to Anthropology 2 s.h. each

These courses provide an introduction and study of human origins, early man, race, language, and physical anthropology, and it surveys the development of cultures and considers inventions and adaptation and other processes of cultural growth and change. Attention is focused upon the origins and growth of human civilization and the place of the individual in the framework of society.

# Social Studies 446. Current Problems in Economics and Government 2 s.h

Designed to analyze the relationship of economics to government, the causes and results of governmental activity are discussed in the light of their economic significance and bearing on public welfare through a study of certain classical decisions of the Supreme Court involving those cases relating specifically to economic issues.

#### Social Studies 447. Diplomatic History of the United States 2

The purpose of this course is to show how we have become gradually conscious of our world interests and responsibilities, and the important role we have come to play in international politics. The growing concept of world democracy as opposed to commercial and military imperialism is stressed.

# Social Studies 448. Cultural Diversity

2 s.h.

The study of primitive and folk cultures is seen in contemporary perspective. The purpose of this course is to increase student awareness of the range and variety of cultures in today's world, and to improve understanding of factors which account for cultural diversity.

#### Social Studies 449. South Asia

s.h.

Designed to give an understanding of political, economic, social, and cultural problems of contemporary South Asia, emphasis is given to post-World War II domestic problems of India, Pakistan, Ceylon and their international relations with the world community.

#### Social Studies 451. The Middle East

3 s.h.

This course is a survey of Indian and Moslem civilization. It shows that economic and political changes alone do not suffice to adjust the peoples of the Middle East to Twentieth-Century civilization, and that many cultural traditions must vanish while some forgotten features of the past are to be revived. Post-war planning for the region from the Near East through Persia, India, Burma, Thailand, and Malaya to the Netherland East Indies is discussed.

# Social Studies 456. International Economic Relations

2 s.h.

This course considers the significance of international trade and exchange to the economic life of our nation and the world economy. An analysis of the economic philosophies relating to international economic organization is made. Emphasis is given to policies which tend to promote freer trade.

# Social Studies 457. Development of Russia

2 s.h.

Factors which shaped the Russian people, such as Byzantinism and the Greek Orthodox faith, the Synod, Tartar state organization, the Mir, Westernization from Peter to Lenin, Slavophilism and dialectic materialism, are emphasized. An account is presented of Soviet internal organization. In addition to the historical background, Russia's great writers are discussed in the light of social and political development.

#### Social Studies 458. Russia as a World Power

s.n

An analysis of Russia's relations with China, Iran, Turkey, the European continent, England, and the United States is presented. Marxist world policy, as interpreted by Kautsky, Plekhanov, Jaures, Bukharin, Trotsky, Lenin, and Stalin is described. The changing views of the Second and Third Internationals, and the organization and methods of the Comintern are discussed.

# Social Studies 471. The United States Since World War I

2 s.h.

This course surveys the major problems, economic, social, political, and international, which have marked our national development since the end of the first World War. It includes a study of the problems of the Twenties, the Great Depression, World War II, postwar reconstruction and the Cold War.

# Social Studies 474. America in Transition

2 s.h.

This course surveys rapidly the results of the Civil War and then emphasizes the major trends, economic and social, which have made modern America. It is intended as a more advanced study than that which is made in the survey course. The period covered is from 1867 to around 1914.

# Social Studies 475. The History of American Thought

2 s.h.

This course considers the influential thinking in America to see how certain ideas or trends of thought have grown out of situations and have in turn helped to mould the course of our history. The student should gain an appreciation for the American contribution to world culture. The discourses of important American thinkers are considered, including Mather, Paine, Jefferson, Emerson, Thoreau, and Veblen.

#### Social Studies 477. Rural Sociology

2 s.h.

During this course, offered at the New Jersey School of Conservation, the student comes face to face with rural life in northern New Jersey. Social processes and problems are considered. Opportunities are provided for students to attend Grange meetings, county fairs, rural dances and parties, and to live for a day or two with a farm family.

# Social Studies 480. Social History of the United States

2 s.h.

This course presents a study of the social and cultural aspects of American history. As such, it supplements but does not take the place of economic and political history. The course considers population movements and growth, rural and urban social problems, status of women, family life, utopian ventures, mass media of communication, amusements and recreation, and human rights.

# Social Studies 482. Conservation and Rural Economic Life

2 s.h

A study of one of the basic economic problems in America today, the course is designed to give the student a better understanding of the relationship between rural and urban living. Offered in cooperation with the New Jersey School of Conservation, trips are arranged to farms, dairy cooperatives, farm bureaus, banks, and town meetings.

#### Social Studies 483. Modern Approaches to Social Problems

s.h

This course is designed to acquaint students with techniques and practices developed for a scientific approach to problems of human relationship. Techniques to be studied include: sampling techniques, questionnaires, interviewing, observation of culture patterns, sociometrics, role-playing and attitude testing. Prerequisite: An introductory course in anthropology and sociology.

#### Social Studies 492A, 492B. Studies in American Life—The East and the West 2 s.h. each

These courses comprise a unit to give the student an understanding of the United States as a cultural, historic, geographic, economic, social and political unit and, at the same time, an appreciation of regional differences which characterize American unity and diversity. It includes a study of the geography, history, literature, art, people, manners, and customs as well as the economic, social, and political problems of the regions.

#### Social Studies 493. Western Europe Since World War I

2 s.h.

A study is made primarily of social, economic and political conditions and trends in the principal European states in the period between the two wars. The events leading to World War II are examined, and the significance for Europe of the war is noted. For the post-1945 period, special attention is given to the movement towards political and economic integration of European states.

#### Social Studies 494. Social Studies and Conservation

2 s.h.

Everyday problems of living as they are related to and affected by the wise use of our natural resources are studied in this course. The student learns about the renewable resources, soil, water, forests, and wildlife, as well as the non-renewable resources, minerals, oil, and coal. Economic, social, community, national, and individual problems are approached by giving the student firsthand experiences gained through extensive field trips in northern New Jersey.

# COURSES IN FIELD STUDIES

#### Social Studies 460. Central Eastern Region

3 s.h.

This fifteen-day tour of Pennsylvania, Maryland, Virginia, West Virginia, North Carolina, and Tennessee covers the major points of historic interest associated with the Colonial Period, the American Revolution, and the Civil War, and the geographic features of the coastal plain, the Piedmont, the Great Valley, and the Appalachian Mountains in these states.

# Social Studies 461. New England and French Canada

3 s.h.

This field-study course gives an opportunity to study by direct observation the historical and geographical features of New England and the Province of Quebec. This trip, occupying the twelve days immediately following the summer session, is made in a modern chartered motor coach with overnight stops at first-class hotels.

# Social Studies 462. Continental United States

10 s.h.

This field-study course consists of sixty-two days of directed travel, including all of July and August, and provides an opportunity for gaining an integrated view of our country as a whole. All important geographic and historical features are studied under the instruction of members of the college faculty and local specialists.

# Social Studies 466. Puerto Rico and the Virgin Islands

2 s.h.

This is a nine-day field-study course devoted to a survey of our nearest island possessions. It includes an exploration of San Juan and its vicinity, including the University, the rain forest and the submarine gardens, a two-day trip through the island visiting pineapple, coffee, sugar, textile, and rum producing areas, churches, homes, and historic places. One day is spent in St. Thomas, largest of the Virgin Islands. The trip to and from the islands is made by air.

# Social Studies 467. Florida

2 s.h.

This is a field-study course covering the Florida peninsula including both coasts, the Everglades, and the Lake Region. Among the places visited are ancient St. Augustine; the winter playgrounds at Palm Beach and Miami; the Tamiami Trail through the Everglades; the west coast cities of Sarasota, St. Petersburg, and Tampa; and the Lake Region in the neighborhood of Lake Wales and Orlando. The trip affords opportunity for topological, historical, and industrial studies.

#### Social Studies 469. Mexico

3 s.h.

This field-study course aims to give a comprehensive view of contemporary Mexican life with its geographic, economic, historic, and cultural setting. Transportation to and from Mexico City is by air and in Mexico by private cars. Places visited include Xochimilco, Acolman, Teotihuacan, Fortin, Pueblo, Oaxaca, Guadalajaro, Quaretro, Guanajuato, Patzcuavo, San Miguel de Allende, San Jose, Purua, Morelia, Toluca, Taxco, and Cuernevaca. The itinerary is carefully planned to include all points of major interest and significance. Special studies may be made in geography, history, art, architecture, archaeology, sociology, economics, and other fields.

#### Social Studies 479. Mediterranean Region and Holy Land

6 s.h.

This is a seven week field study of the countries adjacent to the Mediterranean Sea including short stops in Paris, Madrid and Athens, and more intensive studies of Italy, Turkey, Syria, Lebanon, Israel, Jordan, Egypt, Tunisia, and Morocco. The ancient and modern civilizations of these countries will be studied with particular attention to their significance in the contemporary world. Opportunities for special studies in specific areas of geography or history will be available to students.

# Social Studies 481. The West Indies

2 s.h.

This course consists of ten days of directed travel in countries in the Caribbean. Transportation is by air and private car. Opportunities are given for study of geographic, historic, economic, and cultural phenomena in Puerto Rico (one day), Santo Domingo (two days), Haiti (two days), Jamaica (two days), Cuba (two days), visiting San Juan, Cuidad Trujillo, San Cristobal, Port au Prince, Kenscoff, Kingston, Havana, and rural areas in all countries.

# Social Studies 486. World Survey

4 s.h.

This is a thirty-five day field-study course planned to give the student a general comprehensive vision of the kind of a world we live in with its varying culture patterns and problems. The itinerary covers the Tokyo and Kamakura area in Japan; Manila and its environs in the Philippines; Hong Kong, and the Kowloon Peninsula in southeast China; Bangkok in Thailand, Calcutta, Delhi, Agra and Bombay in India; Cairo and Memphis in Egypt; Jerusalem and Damascus in the Holy Land; Baalbeck and Beirut; Istanbul; Athens and Corinth; and Rome.

#### Social Studies 487. Field Studies in the Arts: European Civilization 6 s.h.

This field-study course gives an opportunity to study by direct observation the development of European culture from ancient Greco-Roman civilization to modern times. It deals with Byzantine, Romanesque, Gothic, Renaissance, Baroque, and Rococo architecture and art and changes in art forms to modern times. The spectacular rise of European music since the Renaissance forms an important part of this study. The close relationship between the arts and historical and social changes in European civilization is examined

# Social Studies 489. South Pacific

6 s.h.

This is a seven week field-study course covering the islands of the South Pacific region, Australia and New Zealand. The purpose of this course is (1) to study the

various culture patterns of these islands, (2) to appreciate their significance in recent history and in the future history of the twentieth century, (3) to understand the importance of Australia and New Zealand in the modern world. Among the places to be visited are Tahiti, Fi'i, Tonga, New Zealand, Australia, Tasmania, East New Guinea, Papua, New Caledonia, the Isle of Pines, Samoa, Hawaii, and other islands. The geographical, historical, economic and anthropological patterns of the region are studied. There are visits to farms, mines, schools, public buildings and native villages, and opportunities to meet people in all sorts and conditions of life.

# Social Studies 496A, 496B, 496C. North Pacific

2 s.h. each

This is a seven week survey of the North Pacific area including Hawaii, Japan and Alaska; about two and a half weeks are spent in each of the three areas.

Part 496A, Hawaii—The East-West Institute in Hawaii prepares the students for the visit to Japan emphasizing the ethnic and cultural relationships of the two areas. All four of the leading Hawaiian Islands (Oahu, Hawaii, Maui and Kauai) are studied.

Part 496B, Japan—In Japan, studies will be made in Tokyo, Nikko, Kyoto, Nagoya, Hakone, and other areas emphasizing Japan's economic progress, education, home life, scenic and cultural features and the people of Japan.

Part 496C, Alaska—In Alaska, Anchorage, Nome, Kotzebu, Juneau and other centers are visited seeing Eskimo, pioneer and contemporary life, emphasizing ways of living, crafts and the economic and social developments of the forty-ninth State.

This program includes three courses—Part A, Hawaii; Part B, Japan; Part C, Alaska. Each course may be taken for two points of graduate or undergraduate credit. Two, four, or six points may be earned or the courses may be audited for no credit. The Hawaiian section (A) will take the place of Soc. St. 488, which will be discontinued and persons who have already received credit in that course may not take this section for credit.

#### THE DEPARTMENT OF SPEECH

Graduate Advisor: DR. L. HOWARD FOX

Speech education in the schools of New Jersey has received increasing recognition in recent years with the conviction that effective oral communication is important to the achievement of self-realization, vocational competency, social effectiveness, and good citizenship. Additional programs of speech are being established to provide developmental and corrective work according to each student's needs. The effectiveness of those programs depends upon the sound and extensive preparation of master teachers who can organize and supervise speech programs and who can offer dynamic leadership in helping to integrate the speech program in the over-all school curriculum.

The graduate program in speech allows qualified students to specialize in one of two areas of speech education: speech arts or speech therapy. The candidate may also, through his choice of elective courses, strengthen his competencies in both areas.

It is expected that each graduate student will have at least one of the following goals for his work:

- 1. To be further qualified as a speech therapist in schools and special institutions.
- 2. To increase his skill as a teacher of speech and dramatics in secondary schools.
- To provide opportunities for the completion of requirements for certification in the state and in the national professional organization, the American Speech and Hearing Association.

# PREREQUISITES FOR ADMISSION TO THE PROGRAM IN SPEECH ARTS

Students wishing to matriculate in this area of specialization must have completed the following courses, or equivalents, and hold a New Jersey State Department of Education certificate in Speech Arts.

Each student must also be capable of setting a good example of acceptable speech. If his voice and speech patterns are considered to be substandard he will be required to take Speech 550 early in his period of matriculation; if the speech problem is severe, he may be refused permission to matriculate.

Eighteen semester hours of Professional Education courses including the Methods of Teaching Speech and Dramatics.

Eighteen semester hours of specialization courses with at least one course in each of the following areas:

 Area:
 Courses:

 Fundamentals of Speech —
 Speech 439A, 439B, 472, 100, 103, 104, 208.

 Public Speaking —
 Speech 449, 462, 470, 204.

 Oral Interpretation —
 Speech 106, 448.

 Methods in the Teaching of Speech —
 Speech 417.

 Dramatics —
 Speech 107, 108, 435, 436, 437A, 437B, 438, 456, 471.

# REQUIREMENTS FOR THE M.A. DEGREE IN SPEECH ARTS

I. General Education (see Master's Degree Program Patterns)

6-12 s.h.

II. Basic Professional Education (see Master's Degree Program Patterns)

6-9 s.h.

III. Specialization in Speech Arts

11-20 s.h.

A. Required Courses

Speech 449. Advanced Public Speaking, or

			·		
	Speech	470.	Argumentation and Debate, or ? 2-3 s.h.		
	Speech	565.	Advanced Oral Interpretation		
	Speech	567.	Seminar in Dramatic Production	6	s.h.
	Speech	592.	Areas and Techniques of Speech	3	s.h.
R	Elective	c. Thr	rough advisement and based on needs and interests of each st	ud	ent.
υ.					
	Speech	436.	Fundamentals of Stage Lighting		s.h.
	Speech	438.	Creative Dramatics	2	s.h.
	Speech	448.	Choral Speaking	2	s.h.
	Speech	457.	Directing the Assembly Program	2	s.h.
	Speech	464.	Psychology of Oral Communication	2	s.h.
	Speech	471.	Advanced Acting	2	s.h.
	Speech	550.	Advanced Study of Voice and Speech Production	3	s.h.
	Speech	563.	Scenery Design and Construction	3	s.h.
	Speech	564.	History of the Theatre	2	s.h.
	Speech	566.	Costume and Make-up for Stage	3	s.h.
	Speech	590.	Problems in the Teaching of Speech	3	s.h.
	Speech	591.	Organization and Administration of School		
			Speech Programs	2	s h

#### C. Additional Departmental Requirements:

Speech 462. Group Discussion, or

- 1. Written Comprehensive Examination.

  If necessary, graduate faculty may require a supplementary oral examination.
- 2. Oral demonstration of communication skill. Prior to the student's final semester, each Master's degree candidate must give evidence of satisfactory platform or performance skill beyond the prerequisite requirement of satisfactory personal speech. The type of performance or demonstration is to be arranged with his advisor prior to the scheduling of any such event; its nature will depend upon the individual experience and goals of each candidate.

Minimum: 32 s.h.

# PREREQUISITES FOR ADMISSION TO THE PROGRAM IN SPEECH THERAPY

Students wishing to matriculate for the Master of Arts in Speech Therapy must have completed 30 semester hours in the following courses, or equivalents, and hold or be eligible for a New Jersey State Department of Education certificate in Speech Correction:

Each student must also be capable of setting a good example of acceptable speech. If his voice and speech patterns are considered to be substandard he will be required to take Speech 550 early in his period of matriculation; if the speech problem is severe, he may be refused permission to matriculate.

A minimum of 9 s.h. in Professional Education Courses, with at least one course in each of the following areas:

Principles and Practices of Education Educational Psychology Curriculum A minimum of 18 s.h. in the following courses, or their equivalents:

Course:	Undergraduate M.S.C. course(s) meeting this requirement:
Psychology and/or Education of the	Education 452
Handicapped	
Phonetics	Speech 208
Anatomy and Physiology of the	Speech 104
Auditory and Vocal Mechanisms	
Speech Correction	Speech 209
Speech Pathology	Speech 410
Clinical Practice in Speech	Speech 461A, 461B
Measurement of Hearing (Auditory)	Speech 468
Voice and Diction Improvement	Speech 103

# REQUIREMENTS FOR THE M.A. IN SPEECH THERAPY

I. General Education (see Master's Degree Program Patterns)  II. Basic Professional Education (see Master's Degree Program Patterns)  III. Specialization in Speech Therapy	6-12 s.h. 6-9 s.h.
A. Required Courses:	9 s.h.
Speech 535A. Graduate Seminar in Speech, Hearing and Language Disorders	3 s.h.*
Speech 535B. Graduate Practicum in Speech, Hearing and Language Disorders	3 s.h.*
Speech 531. Advanced Audiology, or approved elective Speech 592. Areas and Techniques of Speech	
*These courses taken concurrently may constitute full-time summer session for part-time graduate student.	requirement
B. Elective Courses:	2-11 s.h.
Selections among the following courses will be determined through and will be based on needs and interests of each student.	advisement
Speech 411. Advanced Speech Pathology	3 s.h.
Speech 412. Speech Diagnosis	3 s.h.
Speech 439F. Voice Disorders	2 s.h.
Speech 439G. Speech Correction	
Speech 481A, 481B. Teaching Neurologically Impaired Children Speech 482. Stuttering	2 s.h.
Speech 483A, 483B. Methods and Materials in Teaching Speech t  Language Impaired Children	
Speech 484. Cleft Palate and Oral Deformities	2 s.h.
Speech 533. Supervision of Speech and Hearing Programs	
Speech 534. Advanced Anatomy and Physiology of the Vocal an Auditory Mechanisms	
Speech 522. Advanced Phonetics	
Speech 532A. Practicum in Speech Rehabilitation	
Speech 464. Psychology of Oral Communication	
Speech 472. Voice Science	
Speech 594A, 594B. Independent Study in Speech Rehabilitation	
Speech 469. Auditory Rehabilitation	
Speech 531. Advanced Audiology	
Speech 550. Advanced Study of Voice and Speech Production	3 s.h.
C. Additional Departmental Requirements:	

1. Written Comprehensive Examination. If necessary, graduate faculty may require a supplementary oral examination.

- 2. Oral demonstration of communication skill.

  Prior to the student's final semester, each Master's degree candidate must give evidence of satisfactory platform or performance skill beyond the prerequisite requirement of satisfactory personal speech. The type of performance or demonstration is to be arranged with his advisor prior to the scheduling of any such event; its nature will depend upon the individual experience and goals of each candidate.
- 3. Majors in speech pathology must complete a total of 275 hours of supervised direct clinical experience.

Minimum: 32 s.h.

# **GRADUATE COURSES**

# Speech 522. Advanced Phonetics

2 s.h.

Skill in the use of phonetics is developed further in recognizing and distinguishing acceptable English speech sounds, deviant speech sounds, regional variations in standards of American English, and sounds in foreign languages. Additional study is devoted to the stress, phrasing, and intonation patterns used in speaking English, with some analysis made of these elements on other languages. Prerequisite: Sp. 104 or equivalent.

# Speech 531. Advanced Audiology

3 s.h.

The purpose of this course is to increase skill in administering tests for determining pure-frequency and speech reception thresholds. Emphasis is placed on evaluation and interpretation of test results and on the analysis of client histories. Principles and techniques of hearing aid evaluation, measurement of recruitment, and tests for psychogenic deafness and malingering are studied. Consideration is also given to pre- and post-surgical audiometry, and to the special problems of differential diagnosis in testing children. Prerequisite: Sp. 468 or a basic audiology course.

# Speech 532. Practicum in Speech Rehabilitation

2 s.h.

This course provides advanced students with the opportunities for the practical application of diagnostic and rehabilitative techniques with children and adults who have major speech and language problems. Qualified students participate in specialized laboratory experiences which include planning and supervising speech therapy sessions, providing rehabilitative services to individuals and small groups, interviewing applicants, and administering audiometric tests. Prerequisite: 60 clinical hours in speech practicum.

# Speech 533. Supervision of Speech and Hearing Programs

2 s.h.

Methods of organization and administration of the speech correction and improvement programs are discussed. Emphasis is placed upon problems of screening, referral, speech-staff training and orientation, in-service courses, parent and community relations, integration with other disciplines, and development of new materials for testing, teaching, and evaluating.

# Speech 534. Advanced Anatomy and Physiology of the Vocal and Auditory Mechanisms

3 s.h.

The basic anatomy of the mechanisms of speech reception and expression is reviewed. Consideration is also given to the integrated functioning of the central nervous system, the automatic nervous system, and the endocrine system. The effects of abnormalities of structure and function of the speech and hearing processes are emphasized. Discussion includes the medical and surgical aspects of rehabilitation, and the hygiene of the ear, nose, and throat. Demonstrations and supervised laboratory dissections are included. Prerequisite: Sp. 208 or equivalent.

#### Speech 535A. Graduate Seminar in Speech, Hearing and Language Disorders

3 s.h.

# Speech 535B. Graduate Practicum in Speech, Hearing and Language Disorders

3 s.h.

Graduate speech majors specializing in the speech sciences are required to devote one summer session to the study of speech and language disorders and to participate in the therapy program of the Speech and Hearing Center. Emphasis is placed upon the diagnostic, therapeutic, and evaluative techniques employed in working with children and adults who have speech disorders of organic etiology. Minimum of 135 clock hours

of supervised teaching must be accumulated. Prerequisite: Sp. 410. (These courses taken concurrently may constitute full-time summer session requirement for part-time graduate student.)

# Speech 550. Advanced Study of Voice and Speech Production 3 s.h.

The study is made of materials and methods used in the teaching of speech fundamentals on the junior high and senior high school levels. Review and further application of basic subject matter, including English and comparative phonetics, are stressed. Opportunities are provided for practice in improving or further developing personal voice and speech skills, in directing the practice of students with minor speech difficulties, and in phonetically transcribing speech from phonograph records or tape recordings. Some consideration is given to methods of helping students, for whom English is not a native language, to improve their voice and speech. Prerequisite: Sp. 100, Sp. 103 or equivalent.

#### Speech 563. Scenery Design and Construction

3 s.h.

This course is designed to extend the advanced speech student's knowledge in scenery design and construction techniques. Special emphasis is placed upon stage design as related to the play, the director, and the audience. The course of study includes a survey of the styles of design and the use of the perspective sketch and stage model in planning the stage setting. The application of stage construction techniques is used to demonstrate the necessity of scene design in planning the stage production. Each student is expected to design and plan the construction of scenery for a play appropriate for production in a secondary school.

# Speech 564. History of the Theater

2 s.h.

This course is designed to give the advanced speech student a comprehensive view of the development of the theater from the Classic Greek drama through the Nineteenth Century. Special attention is placed upon plays and playwrights of the period, theater architecture, scenery, costuming and styles of acting and presentation of each period. Course work includes oral reports, lectures, and classroom demonstrations. Advanced students may enroll with the consent of the instructor.

#### Speech 565. Advanced Oral Interpretation

2 s.h.

This course is designed to provide further study of techniques in interpretation of poetry and prose. Extensive practice is provided in the analysis, presentation and various types of literary material (short story, ballad, narrative, sonnet, etc.) suitable for use in the classroom and for special programs. Prerequisite: Sp. 106 or equivalent.

# Speech 566. Costume and Make-up for the Stage

3 s.h.

This course provides the advanced student with opportunities to design costumes and make-up for plays of various periods. Consideration is given to the use of materials, colors, and textures in achieving desired effects on the stage. Laboratory work is provided to develop skill in creating a wide variety of make-ups.

# Speech 567. Seminar in Dramatic Production

6 s.h

This seminar is for advanced play-production students. It allows each member of the class to pursue projects in keeping with his own needs or interests in both the technical and directorial aspects of play production. When possible, supervisory assignments are made in connection with the current program of plays. The seminar meets a minimum of four hours daily for individual project or laboratory activities, for evaluation of specific teaching problems in connection with the current plays, and for group analysis of typical production problems. Enrollment is open to matriculated graduate students in Speech, or by permission of the instructor.

# Speech 590. Problems in the Teaching of Speech

3 s.h.

This course is designed to present an analysis and investigation of the problems encountered in the speech classroom, and to survey the textbooks and teaching aids available to the teacher of speech on various grade levels. Consideration is also given to the problems of (1) motivation, (2) methodology, (3) evaluation procedures, and (4) co-curricular speech activities.

# Speech 591. Organization and Administration of the School Speech Program

This course deals with the problems of organizing and administering a comprehensive

speech program in a school system. Consideration is given to curriculum development, teacher-administration relationships, class scheduling reports and records, in-service training, and integration of the speech program in the total school curriculum.

#### Speech 592. Areas and Techniques of Research in Speech

3 s.h.

Methods of research appropriate for studies in speech are analyzed. Significant problems in the field are investigated and discussed, and published research projects are evaluated. Special attention is given to the problems of locating and utilizing professional journals and other publications for research. Each student is required to prepare an outline for a research project, to develop a bibliography, and to complete the research study. Prerequisite: Educ. 503.

# Speech 594A, 594B. Independent Study in Speech Rehabilitation 1 s.h. each

Students on the graduate level may select an area of Speech rehabilitation and with advisement, study the literature in the field, observe therapy at special schools and centers, and write reports on findings. Conferences with the instructor will further enhance the student's knowledge and scope of the area studied.

# SENIOR-GRADUATE COURSES

The following courses may be applied as prerequisites or equivalencies for admission to the program. In certain instances some are acceptable for graduate credit if the advisor so recommends.

# Speech 410. Speech Pathology

2 s.h.

This course presents a study of the etiology and pathology of major language and speech disorders which may result from organic, functional, or emotional disturbances including severe stuttering, dysphonia, laryngectomy, cleft palate, cerebral palsy, and aphasia. Emphasis is placed upon diagnosis, evaluation, and rehabilitation. Prerequisite: Sp. 439B, or the equivalent.

# Speech 411. Advanced Speech Pathology

3 s.h.

The purpose of the course is to provide further study and evaluation of modern techniques of speech rehabilitation, and to review research findings in the areas of voice, articulation, rhythm, and symbolization disorders. Consideration is given to the ways in which speech rehabilitation may be integrated with related health services and educational services in schools and special centers. Prerequisite: Sp. 410 or equivalent.

#### Speech 412. Speech Diagnosis

3 s.h.

The purpose of this course is to analyze and evaluate popularly employed techniques of speech diagnosis. Commercially available diagnostic tools, as well as tests that may be designed by the therapist to meet specific needs are discussed. Consideration is also given to the dynamics of interviewing and to the reporting and interpreting of client histories. Specific methodology to be used in providing speech rehabilitation services to children and adults with speech and language disorders is evolved. Prerequisite: Sp. 410 or equivalent.

#### Speech 435. Stagecraft

2 s.h.

This workshop course provides training in constructing and painting of scenery, and lighting the stage. A minimum of twelve clock hours in the scene shop is required, in addition to the regular class sessions. Recommended prerequisite: Sp. 108 or the equivalent.

# Speech 437A. Dramatic Production Workshop: Acting

2 s.h.

Speech 437B. Dramatic Production Workshop: Technical Theatre 2

These courses are designed for those students desiring a comprehensive introductory course in theater production. Students participate as junior members of the summer-theater company. They place special emphasis upon stagecraft and lighting, or acting. In addition, they participate in the costuming, make-up, and house-management activities. These courses may be used as partial fulfillment of the requirements of the undergraduate speech major or minor, or as a prerequisite to matriculation for the Master's degree in speech.

# Speech 436. Fundamentals of Stage Lighting

3 s.h.

The purpose of the course is to analyze the functions of light on a stage and to study and use the instruments available to achieve desired effects. Optimum and minimum equipment are studied. The laboratory work is done in the Memorial Auditorium at the College, which houses modern and flexible stage lighting equipment, and in a small auditorium with limited facilities. Students are encouraged to apply the principles of stage lighting to the specific auditoriums in which they may work. Appropriateness of lighting for different types of stage activities is a fundamental consideration in the course. Prerequisite: Sp. 108 or Sp. 435 or permission of instructor.

#### Speech 438. Creative Dramatics

2 s.h.

The purpose of this course is to study the principles and techniques of creative dramatics as they may be applied in the classroom, theater, and speech therapy program. Major emphasis is placed on materials for dramatization paralleling the mental, physical, and emotional levels of children in grades kindergarten through eight. Application of these techniques with high school students is also considered. The philosophy of creativity is discussed, and attention is given to the integration of the arts in the total educational picture. The course includes a workshop in which members of the class plan and carry out creative activities with children.

# Workshop in Speech Correction

The following courses are especially designed for students who wish to fulfill certification requirements to teach children with speech disorders or for graduate students needing to fulfill prerequisites for matriculation for the Master's degree in Speech. Specialized areas in the speech sciences are offered on a workshop basis requiring attendance during all or part of the six-week summer session, depending upon the number of units elected. Speech 439A, 439B, 439C must be taken in sequence. (439D may be taken with 439C).

# Speech 439A. Phonetics

2 s.h.

An intensive study is made of the manner and place of articulation of sounds heard in American English. Skill is developed in using the International Phonetic Alphabet to transcribe speech both prescriptively and descriptively, from live and recorded voices. Consideration is also given to the intonation and stress patterns of spoken English.

# Speech 439B. Anatomy and Physiology of the Auditory and Vocal Mechanisms 2 s.h.

The work of this course entails a detailed study of the larnyx and ear as they function in the production and reception of speech. Consideration is also given to the physics of sound and to the structure and functioning of the nervous system.

#### Speech 439C. Speech Pathology

2 s.h.

The purpose of this course is to present a comprehensive analysis of the major pathologies of articulation, voice, rhythm, and symbolization. The etiology and treatment of severe stuttering, asphasia, cerebral palsy, and the dysphonias are discussed.

# Speech 439D. Practicum in Speech Correction

1 s.h.

# Speech 439E. Advanced Practicum in Speech Correction

Students are required to spend forty-five clock hours in the Speech and Hearing Center for each semester-hour of credit in order to gain experience in planning and carrying out programs in therapy with children who have speech and hearing problems. Written observation reports, lesson plans, and progress reports are required. Students also participate in staff conferences and meetings with parents of children enrolled for speech therapy. Practicum hours may also be arranged at local speech centers and hospital units. Prerequisite: A course in speech correction.

# Speech 439F. Voice Disorders

2 s.h.

The purpose of the course is to study selected disorders of voice production. Consideration is given to etiology, pathology, and therapy related to voice nodules, contact ulcers, paralysis of the vocal cords, and other organic voice problems.

Speech rehabilitation techniques for the laryngectomized, and persons with cleft palate conditions are also discussed. Prerequisite: Sp. 439B and C, or consent of the instructor.

#### Speech 439G. Speech Correction

2 s.h.

This course presents an introduction to the area of speech development and correction, with emphasis on voice and speech problems commonly found in children at the nursery, elementary and secondary-school levels. Consideration is given to the following: (1) subect matter; (2) diagnostic, remedial, and evaluative techniques; (3) testing and practice materials. Demonstrations with children who have faulty patterns of speech or whose speech development has been retarded are provided. Opportunities for serving as cadet teachers in the Speech and Hearing Center by generally assisting the therapists and by observing therapy with children who have speech disorders.

# Speech 448. Choral Speaking

2 s.h.

In a speaking choir, students acquire skill in interpreting literature suitable for group practice. Consideration is given to their use in the various grade levels in teaching. Students prepare a group of selections for their particular interests and purpose.

# Speech 449. Advanced Public Speaking

2 s.h.

This is an advanced course in the theory and practice of public speaking. It provides opportunities for further training in more complex speech skills, especially in persuasive speaking and conducting a meeting. Prerequisite: Sp. 204 or the equivalent.

#### Speech 448. Choral Speaking

2 s.h.

This is a course in the study of the problems of speech, the development of a pleasant speaking voice with precision in diction, and the application of speech skills to practical speaking situations. (Not for Speech majors.)

#### Speech 456. Play Direction

2 s.h.

This course covers choosing, casting, and directing plays. Scenes are directed for class criticism, and a detailed prompt-book of one play is prepared. Whenever possible, this play is given publicly before an audience. This course complements Sp. 435. Prerequisite: Sp. 437B, or permission of the instructor.

# Speech 457. Directing the Assembly Program

2 s.h.

It is the purpose of this course to prepare students to organize and to conduct assembly programs. Class lectures and discussions cover all phases of the director's responsibilities. Groups conduct research on suitable program materials and share their findings. Each student prepares a detailed script for an assembly or commencement program, or a comprehensive set of notes and materials.

# Speech 461A, 461B. Practicum in Speech Correction, I and II

2 s.h.

Remedial speech laboratories are maintained at the College as a community service so that students may apply their knowledge of diagnostic, remedial, and evaluative techniques in a professional laboratory experience. Students assist staff members in demonstrations, prepare lesson plans for individual and group speech therapy, and teach under supervision. Prequisites: PHONETICS and SPEECH CORRECTION

#### Speech 461C. Advanced Practicum in Speech and Hearing

2 s.h.

This course provides further opportunities to apply techniques of speech and hearing rehabilitation under supervision in a laboratory setting. Students are required to: (1) administer audiometric tests and speech diagnostic examinations: (2) work with parents of children who have speech disorders; and (3) assist the beginning student-speech therapist in planning and carrying out therapy sessions. Prerequisite: Sp. 461A and B

# Speech 462. Group Discussion and Leadership

3 s.h.

The purpose of this course is to study the principles of democratic discussion and the methods employed in guiding and participating in the informal group discussion, and in the panel, symposium, lecture, and debate forum. Parliamentary procedure is considered. Opportunities in the application of principles and methods studied are given

through student participation in discussion programs dealing with community and national problems. Attention is also given to the ways in which group discussion may be used as an effective teaching method in the general school curriculum.

#### Speech 464. Psychology of Oral Communication

2 s.h.

This course deals with the development of speech and language in the individual, and the problems of communication that lead to confusion of meaning and misunderstanding. Consideration is given to the psychology of persons who are handicapped in speech, hearing, and/or reading, including hysterical or psychogenic impairments. The contributions of learning theory, and semantics to the field of communication are studied.

#### Speech 466. Speech Development: Improvement and Re-education 2 s.h

This course is intended for superintendents, principals, and classroom teachers who have little or no background in speech education. Consideration is given to the following topics: (1) speech development; (2) speech difficulties or problems found on the kindergarten, elementary, and secondary-school levels; (3) acquisition of good voice and speech characteristics; (4) use of techniques and materials in classrooms to motivate good speech patterns; and (5) ways of setting up and integrating speech education in school systems. Demonstrations with individuals and groups are made, and students are expected to prepare a practical project. (Not for Speech majors)

# Speech 468. Measurement of Hearing

3 s.h.

A comprehensive study of the measurement of hearing is made in this course with attention given to the educational implications of impaired audition and deafness. A review of the physics of sound and the anatomy and physiology of the auditory mechanism is included. Emphasis is placed on principles and techniques of screening tests, interpretation of test results, and pure-tone and speech audiometry. Demonstrations and supervised practice are provided. Prerequisite: Sp. 208 or equivalent

#### Speech 469. Auditory Rehabilitation

2 s.h.

The purpose of the course is to study the current theories and practices of teaching speech reading and auditory comprehension to hard-of-hearing children and adults. The educational problems of helping the student to gain proficiency in speech reading as a receptive language process are discussed. Principles of auditory training are studied as a means to help develop the use of residual hearing. Emphasis is placed on the ways in which speech reading and auditory comprehension supplement each other in the rehabilitation of the hard-of-hearing individual. Practical consideration is given to the preparation of lessons for the acoustically impaired at all grade levels.

# Speech 470. Argumentation and Debate

3 s.h.

A study is made in this course of the principles of argumentation including characteristics of propositions, definition of terms, logical organization, evidence, and oral argumentation techniques. Consideration is also given to the organization and coaching of school forensic programs. Practice and experience are afforded the student in argumentation and debate on current, significant issues.

#### Speech 471. Advanced Acting

2 s.h.

Through three areas of activity this course aims to broaden the student's appreciation of the art of acting and to increase his own acting skill. This is accomplished through individual study of established actors and schools of acting, through critiques of acting as observed by attending professional productions, and mainly through preparation of solo and group acting exercises, both original and from established dramatic literature. As far as possible, attention is paid to the student's future personal use of the material and exercises of the course. Prerequisite: Sp. 105B. or its equivalent, with a grade of "B" or better, or the permission of the instructor.

#### Speech 472. Voice Science

2 s.h.

The purposes of the course are: (1) to have the student make a careful analysis of his own vocal structure and vocal habits as applied to the basic aspects and factors of sound; (2) to analyze ineffective and effective voice, characteristics of pitch, volume and quality, and work for the elimination of unpleasant elements through intensive

practice; and (3) to acquire and develop control of a pleasing speaking voice in various speaking and oral reading situations. Prerequisite: Sp. 100 or 103.

# Speech 481A, 481B. Teaching Neurologically Impaired Children 2 s.h. each

A. Theory and methodolgy. Study of the causes and effects of neurological impairment in school age children. Emphasis will be on methods effective in helping children whose perceptual dysfunctioning interferes with development of communication and of learning. Demonstrations with neurologically impaired children will serve as the basis for study and discussion.

B. Demonstration and practice teaching. Student teaching, under supervision, of groups of children who have neurological impairments. Discussion and evaluation will follow each lesson. Parents of the children will take part in the conferences with the teachers. (Credit for whole course dependent upon completion of part B.)

#### Speech 482. Stuttering

2 s.h.

Principles and methods of speech therapy with children who stutter. Methods of evaluation, specific techniques of speech therapy, and principles coordinating speech therapy with home and with school life will be the focus of the practical course. Demonstrations with children who stutter will serve as the basis for study and discussion.

# Speech 483A, 483B. Methods and Materials in Teaching Speech to Language Impaired Children—I and II 2 s.h. each

I. Nature and needs in helping language impaired children to develop concepts for expressing thoughts and needs. Special emphasis on mentally retarded children. Demonstrations with trainable and educable children, aphasic children and schizophrenic children.

II. Methods, materials and programs for teaching children with language impairments in a supervised and evaluated clinical practicum on campus.

#### Speech 484. Cleft Palate and Oral Deformities

2 s.h.

Study of etiology and characteristics of cleft palate and oral deformities or malfunctions in children. Emphasis on speech therapy and surgical repair procedures. Unit on tongue thrust therapy is also included.

# General Education Courses in Speech

The following courses may be chosen by matriculated students (other than Speech Majors) to meet the requirements in General Education outside their specific area of specialization.

Speech 438, 439A, 448, 49, 454, 456, 457, 462, 464, 466, 470, 550, 564, 565.

# **GEOGRAPHY COURSES**

# Geography 503. Economic Geography of the United States and Canada

A study is made of the agricultural, industrial, and commercial development of the United States and of the geographic factors that have contributed to that development.

# Geography 504. Economic Geography of Europe

2 s.h.

2 s.h.

This course constitutes a study of the economic development of the nations of Europe in relation to the environmental background and resources that have made Europe one of the world's leading continents.

#### Geography 509. Economic Geography of Asia

2 s.h.

This course constitutes a treatment of the economic and commercial development of the countries of Asia in relation to their natural environment.

# Geography 405. Urban Geography

2 s.h.

The student is introduced to the complex forces that have been and are responsible for the intense concentration of political, social, and economic activities within a small area. This area is then analyzed from the point of view of its evolution, morphology, and function. The changing characteristics of our cities, suburbanization, city-service areas, and city-hinterland interrelationships are also investigated. Special emphasis is placed upon research and source materials.

#### Geography 406. Geology

2 s.h.

This course deals with the earth and its geographic, stratigraphic, and structural development throughout geologic time; the record of the evolution of life as interpreted through a study of rocks and fossils.

#### Geography 408A and 408B. Political Geography

2 s.h.

This course deals with the geographic conditions influencing the significant changes in the political divisions of the world. Emphasis is placed on geographic factors influencing racial, religious, commercial, and political adjustments between nations.

#### Geography 411. Historical Geography of the United States

3 s.h.

This course provides an opportunity for students of history, geography, and related disciplines to become familiar with the major principles of historical geography. It emphasizes the geographic factors pertinent to an understanding of American history. Time-place relationships ranging from pre-Columbian America to the present are surveyed and analyzed critically. Particular attention is paid to source materials, to the cartography of specific times, and to geographical lore and thought.

# Geography 412. Geography of Africa

3 s.h.

This course includes a topical and regional study of Africa. Special emphasis is placed upon the problems of economic adjustment in the tropics. Soils, vegetation, climate, physiography, natural resources, and other aspects of the physical environment are examined critically in the light of man's habitation of the continent. Relations between Africa and the rest of the world are analyzed.

#### Geography 414A and 414B Advanced Economic Geography 2 s.h. each

This course is a study of the influence of the physical environment upon the production of, the trade in, and the utilization of the important agricultural, forest, mineral and sea products, and the manufactured commodities of the world.

#### Geography 416. Conservation of Natural Resources

3 s.h.

This course provides an opportunity for students of the social and physical sciences to study the natural resources of the United States. Exploitation and conservation are both stressed. Our major resources are reviewed in terms of use, needs, and future developments. Consideration is given to the growth of legal and social awareness of the need for conservation practices in America.

#### Geography 418. Regional Geography of North America

2 s.h.

This course constitutes a detailed regional treatment of the continent of North

America. Emphasis is placed upon the human activities of the various regions in relation to their natural environment and the relations of the regions to each other. Attention is given to the techniques of presenting the material and the use of geographic tools in the treatment of the subject-matter.

# Geography 419. Geography of the Soviet Union

3 s.h.

This course is designed as a regional analysis of the Soviet Union. It examines critically the physical and human aspects of Soviet geography. Particular emphasis is placed on economic regions. Relations between the European states and the Soviet Union are discussed, and Russia's place in the world economy is analyzed.

# Geography 420. Field Geography and Conservation

2 s.h.

This course constitutes a study of the relation between relief features of northern New Jersey, the location of natural resources, and the way in which land use and population distribution follow these patterns. Emphasis is given to the reading and interpretation of topographical maps and aerial photographs and to a study of the United States Geological and Soil Surveys of this region. By means of an actual land-use survey the student comes to appreciate the problems of conservation as they grow out of man's use of natural resources.

# Geography 421. Population Problems of the World

3 s.h.

An intensive examination of the factors which influence the present-day distributional pattern of the world's people and the political, economic, and social consequences of this development are considered. Particular attention is placed on man-land relationships as related to population problems of contemporary nations.

# Geography 422. Geography of the American Indian

3 s.h.

This course is designed to survey the culture of the American Indian (from the Ice Age to the Reservation) in relation to his geographic environment. It affords an insight into the geography and cultural history of North America prior to the coming of the white man, deals with the problems experienced and created by alien cultures when they meet for the first time, and culminates with discussion of the Indian problems of the present day. It serves to introduce the student to methods employed in interdisciplinary attacks upon cultural problems. The views of the geologist, archaeologist, cultural anthropologist, cultural historian, as well as the geographer are critically examined.

#### Geography 424. Geography of New Jersey

3 s.h.

This course is a detailed topical and regional study of New Jersey. Physiography, climate, soils, flora, fauna, agriculture, industry, trade, population, and relations with neighboring states are intensively studied. On the basis of the data thus examined an attempt is made to delineate the geographic regions of the state. Emphasis is placed throughout on the relationship between New Jersey's people and New Jersey's earth.

#### Geography 425. Geography of Exploration and Settlement

3 s.h.

This course is designed to survey the great age of exploration and settlement (1500-1900) of lands overseas inaugurated by the Columbian voyages. Its major themes are: knowledge concerning the lands of the earth, the unfolding of the world map, the type settlements erected by Europeans in distant lands. Special attention is given to motives for exploration, methods of navigation and travel, routes explored, and the cultural features marking European settlement.

#### Geography 426 Historical Geology

3 s.h.

This course is designed to aid the prospective teacher in acquiring an understanding of the systematic evolution of the present landscape, from the local area to the entire North American continent. Other purposes are to establish the concepts of vast periods of time, of the development of life, of great mountain-making movements, and of the return of all to the sea.

# THE NEW JERSEY STATE SCHOOL OF CONSERVATION

The six State Colleges, the State Department of Education, and the State Department of Conservation and Economic Development jointly operate the New Jersey State School of Conservation at Lake Wapalanne in Stokes State Forest, Sussex County. Credit for the courses given at the New Jersey State School of Conservation may be applied toward the Master's degree at the New Jersey State Colleges, subect to approval in advance by the institution concerned. Students are advised to check with their readers relative to the application of these credits towards graduate degrees.

The following courses may be offered at the New Jersey State School of Conservation. For complete descriptions, please refer to the departmental write-ups appearing in this bulletin. Special descriptive announcements may also be had by writing to the New Jersey State School of Conservation, Branchville, New Jersey.

#### FINE ARTS DEPARTMENT

Fine Arts 415. Designing in Native Materials Fine Arts 474A. Arts and Crafts in Education

#### GEOGRAPHY DEPARTMENT

Geography 420. Field Geography and Conservation

#### INDUSTRIAL ARTS DEPARTMENT

Industrial Arts 442. Conservation of Basic Industrial Materials Industrial Arts 443. The Use of Basic Industrial Materials in Industry

#### EDUCATION DPARTMENT

Education 440. Camping Education
Education 441. Conservation Education
Education 442. Practicum in Camp Leadership
Education 443. Practicum in Camping Education and Administration
Education 444. Practicum in Conservation Education Education 480. Field Science for Elementary Teachers

#### HEALTH AND PHYSICAL EDUCATION DEPARTMENT

Physical Education 410. Water Safety and First Aid

#### SCIENCE DEPARTMENT

Science 405. Field and Laboratory Studies in Science

Science 411. Problems in Field Studies in Science

Science 412. Field Studies in Science: Biological

Science 413. Field Studies in Science: Physical

Science 414. Conservation of Plants and Animals

Science 415. Conservation of Soil and Water

Science 419. Field Science and Conservation

Science 420. Water Supply and Conservation Problems

# SOCIAL STUDIES DEPARTMENT

Social Studies 477. Rural Sociology Social Studies 482. Conservation and Rural Economic Life

Social Studies 494. Social Studies and Conservation

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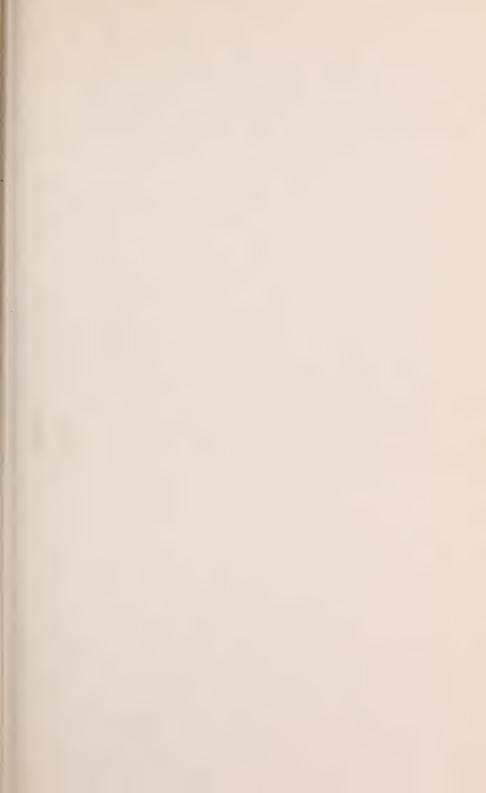
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# MONTCLAIR STATE COLLEGE GRADUATE DIVISION

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# MONTCLAIR STATE COLLEGE

**GRADUATE BULLETIN** 1966-1967

**UPPER MONTCLAIR, NEW JERSEY** 

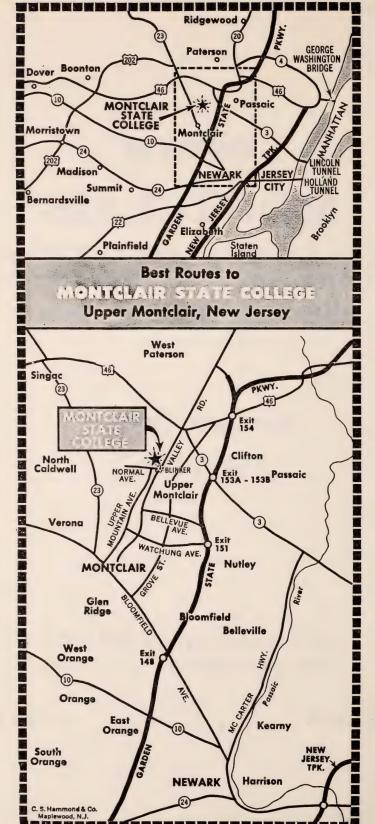


## Bulletin of

## MONTCLAIR STATE COLLEGE

Graduate Division 1966-1967

MONTCLAIR STATE COLLEGE UPPER MONTCLAIR, N. J. 1966



#### HOW TO GET TO MONTCLAIR STATE COLLEGE

#### Location

Montclair State College is on Valley Road and Normal Avenue, Upper Montclair (turn at the blinker). The College is one mile south of the junction of Routes 3 and 46 on Valley Road.

#### Directions for Reaching the College

From Bloomfield Avenue, Montclair Center (Sears' store) proceed north on Valley Road—three miles to the Normal Avenue blinker.

From Route 46 East, the landmark is West's Diner; take the next right, Valley Road—one mile to blinker at Normal Avenue.

From Route 46 West, the landmark is the junction with Route 3. Turn on Valley Road to Montclair, bear right on cloverleaf and proceed south under Route 46—one mile to blinker at Normal Avenue.

From the *Turnpike North* of Exit 10 or *South* from George Washington Bridge turn at Route 3 West or Route 46 West, then as above. From the *Turnpike South* of Exit 10, leave the Turnpike at Exit 10 and follow directions for Garden State Parkway North.

From Garden State Parkway North turn left at Exit 153B and proceed West on Route 3 to Valley Road.

From Garden State Parkway South turn at Route 46 West (Clifton Exit 154) thence to Valley Road. If you miss that turn, continue South to Exit 151, Watchung Avenue, thence West to Valley Road and North to blinker at Normal Avenue.

The #60 Public Service Bus from Newark to Montclair terminates at the South end of the campus.

The #76 Public Service Bus from Paterson to Orange stops at Valley Road and Normal Avenue.

The #66 DeCamp Bus from New York, which leaves on the half hour from Platform 73, Port Authority Bus Terminal, stops at Valley Road and Mt. Hebron Road—one long block from the campus.

The Erie Railroad, Montclair Heights Station, is at the Southwest corner of the campus.

WHEN IN DOUBT - CALL PILGRIM 6-9500

#### FOR INFORMATION ABOUT:

Write to:

General Policies and Program Dr. Thomas H. Richardson President
Instructional Program and Policies
Student Personnel Services, Scholarships and Loans, Dormitories Mr. Lawton W. Blanton, Dean of Students
Admission to Graduate Program Dr. Edward J. Ambry Associate Dean—Graduate
Admission to Undergraduate Division Dr. George G. King Director of Admissions
Evening Division and Summer Session
Certification and Evaluation, Teacher Certificates Miss Simone Picard Counselor and Certification Advisor, Evening Division
Business and Financial Matters
Student Teaching and Placement Dr. Norman E. Lange Director of Student Teaching and Placement
Transcripts and Records Mr. Peter P. Stapay Registrar
Alumni Affairs Mrs. Helen Z. Rendall Alumni Secretary
Public Information Mrs. Mary McKnight Coordinator of Public Information

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#### MONTCLAIR STATE COLLEGE

#### CALENDAR 1966-1967

#### GRADUATE

Registration—Fall Semester

September 17 Evening and Graduate Classes Begin October 4 Fall Convocation and Commencement November 3, 4, 5 Faculty Institute, No Classes November 15 Last day to file for June, 1966, M.A. Degree conferment November 24 to 28 Thanksgiving Recess December 17, 1966 to Christmas Recess January 3, 1967 Evening and Graduate Classes End January 26 January 28, 30, 31 Registration—Spring Semester February 4 Evening and Graduate Classes Begin March 15 Last day to file for September, 1966, M.A. Degree conferment. M.A. Comprehensive Examinations March 15 March 18 M.A. Comprehensive Examinations

April 3

May 27 Evening and Graduate Classes End

Spring Recess

June 4 Baccalaureate and Convocation

June 7 Commencement

September 10, 12, 13

March 23 to

#### Periods for Filing Applications for Matriculation:

Fall, 1966, or Spring, 1967, Admission—June 20, 1966, through July 20, 1966

Spring, 1967, or Summer, 1967, Admission—September 26, 1966, through December 20, 1966

Summer, 1967, or Fall, 1967, Admission—February 13, 1967, through April 26, 1967

Summer, 1967, or Fall, 1967, Admission-June 19, 1967, through July 19, 1967

#### STATE OFFICIALS

#### State Board of Education

GEORGE F. SMITH, President	Metuchen
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HARRY M. SEALS	Annandale
JACK SLATER	Paterson
WILLIAM A. SUTHERLAND Lib	erty Corner
Dr. Deborah Cannon Wolfe	Cranford

#### Acting Assistant Commissioner for Higher Education

DR. MICHAEL B. GILLIGAN

Director of Teacher Education and Certification

DR. ALLAN F. ROSEBROCK

#### ADMINISTRATIVE OFFICERS

Thomas H. Richardson, Ed.D.	President
Allan Morehead, Ed.D.	Dean of the College
	Associate Dean—Graduate
	Director, Business Services
	Director, Evening Division
Simone C. Picard, M.A.	Counselor, Evening Division
Maxine R. Bullard, A.B.	Recorder, Evening Division
Marshall Butler, A.M.	Assistant Director, Evening Division
Patricia Fries, M.A.	
Charity Eva Runden, Ph.D.	Administrative Assistant
George G. King, Ed.D.	Director, Admissions
Norman E. Lange, Ed.D.	Director of Student Teaching and Placement
Orpha M. L. Lutz, Ph.D.	
Peter P. Stapay, M.Ed.	
Harold C. Bohn, Ed.D.	Chairman, Department of English
Lillian C. Calcia, Ed.D.	Chairman, Department of Fine Arts
	Chairman, Department of Mathematics
Philip S. Cohen, Ph.D.	Chairman, Department of Social Studies
Arthur W. Earl, Ed.D.	Chairman, Department of Industrial Arts
L. Howard Fox, Ph.D.	Chairman, Department of Speech
M. Herbert Freeman, Ph.D.	Chairman, Department of Business Education
Paul A. Gaeng, Ph.D.	Chairman, Department of Foreign Language
Irwin H. Gawley, Ed.D.	Chairman, Department of Science
Katharine B. Hall, Ph.D.	Chairman, Department of Home Economics
Richard C. Tews, Ph.D.	Chairman, Department of Health and
n i i wi i wi in	Physical Education
Ralph Walter, Ed.D.	Chairman, Department of Education
Benjamin Wilkes, M.S.	Chairman, Department of Music

#### **GRADUATE COUNCIL**

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Robert E. MacVane,
ex officio
Allan Morehead, ex officio
Simone C. Picard,
ex officio
Charity Eva Runden,
ex officio
Thomas H. Richardson,
ex officio

John R. Beard, ex officio

#### LIBRARY AND AUXILIARY SERVICES

John R. Beard, D.L.S.	Head Librarian
Ruth Beach, B.L.S.	Acquisitions Librarian
Patricia E. Duane, M.L.S.	Catalog Librarian
Elsie Gibson, M.L.S.	Library Science Co-ordinator
Gertrude T. Greenberg, M.L.S.	Serials Librarian
Blanche W. Haller, B.S. in L.S.	Catalog Librarian
Selma Harris, M.L.S.	Reference Librarian
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Doris W. Rockman, M.S.	Reference Librarian
Marian Siegeltuch, M.L.S.	Reference Librarian
Dorothy Walter, M.S.	Librarian, College High
Emma Fantone, A.M.	Audio-Visual Education
Thaddeus J. Sheft, A.M.	Audio-Visual Education

#### GRADUATE FACULTY

	President and Professor of Education
	Dean of the College and Professor of Education
	Associate Dean—Graduate and Professor of Education
Lauranca Pallacamba Ed D	Professor of Education Associate Dean—Undergraduate
Laurence Benagamba, Ed.D.	and Associate Professor of Education
Hugh Allen Ir Ed D	Professor of Physics and Science Education
	Assistant Professor of Social Studies
	Associate Professor of English
	Associate Professor of Speech
	Associate Professor of Social Studies
	Associate Professor of Chemistry
	Associate Professor of Social Studies
	Professor of Latin
	Professor of English
	Associate Professor of Social Studies
	Associate Professor of Psychology
	Associate Professor of Psychology
	Associate Professor of Social Studies
	Professor of Fine Arts
	Associate Professor of Music
	Professor of Mathematics
	Professor of Health and Physical Education
	Professor of Social Studies
	Associate Professor of Zoology
	Professor of Psychology and Guidance
Jerome G. DeRosa, M.A.	Associate Professor of Health and Physical Education
William P. DioGuardi A.M.	Associate Professor of Health and
William T. DioGuardi, A.M.	Physical Education
Arthur W Farl Ed D	Professor of Industrial Arts
	Professor of English
Gerald Edwards Ed D	Associate Professor of Health and
Gerald Edwards, Ed.D.	Physical Education
Emma Fantone A.M	Associate Professor of Education
·	Professor of Social Studies
	Associate Professor of Psychology
	Professor of Speech
	Professor of Industrial Arts
	Professor of Business Education
	Professor of Business Education
	Associate Professor of Education
	Assistant Professor of Foreign Languages
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#### **GRADUATE FACULTY (Continued)**

	A 1 - D 6 - C1 1 -
Vladimir L. Garik, Ph.D.	
Dorothy Garland, M.A.	
Irwin H. Gawley, Jr., Ed.D.	
Abraham Gelfond, Ph.D.	
Alfred H. Gorman, Ed.D.	
Howard L. Haas, Ed.D.	
Ronald Haas, Ed.D.	
Katharine B. Hall, Ph.D.	
Lawrence Hamel, Ph.D.	
Herbert J. Hauer, Ph.D.	
Joseph C. Hecht, Ed.D.	
Gilbert O. Hourtoule, Ph.D.	
Daniel Jacobson, Ph.D.	
Abraham Kampf, Ph.D.	
Ellen Kauffman, A.M.	
Lawrence B. Kenyon, Ed.D.	
Helene Klibbe, Ph.D.	
Walter E. Kops, A.M. (On Leave)	Associate Professor of Social Studies
Stephen W. Kowalski, Ph.D.	Associate Professor of Science
Russell Krauss, Ph.D. (On Leave, Fall Ser	n.) Professor of English
Sidney J. Kronish, Ph.D.	Professor of Social Studies
S. Marie Kuhnen, Ph.D.	
Charles L. Leavitt, Ph.D.	Assistant Professor of English
Gilbert Leight, Ph.D.	
Charlotte R. Lockwood, M.A.	
Orpha M. L. Lutz, Ph.D.	Professor of Psychology
Evan M. Maletsky, Ph.D.	Associate Professor of Mathematics
Samson McDowell, Ph.D.	
Clyde W. McElroy, Ed.D.	
James T. Mehorter, Ed.D.	_
Frank P. Merlo, Ed.D.	
Ben Minor, M.E.E.	
Ward Moore, Ph.D.	
Lois A. More, Ed.D.	
Dorothy J. Morse, Ph.D.	
Earl E. Mosier, Ph.D.	
Henry M. Muschio, Ph.D.	
Louis C. Nanassy, Ed.D.	
Earl K. Peckham, Ed.D.	
James P. Pettegrove, A.M.	
George E. Placek, A.M.	
Sara Prieto, Ph.D.	
Bertha B. Quintana, Ed.D.	
Bertha B. Quintana, Eu.D	Professor of Social Studies

#### **GRADUATE FACULTY (Continued)**

Taha C Dadd Dh D	Associate Professor of Health and
John G. Redd, Ph.D.	Physical Education
Maynard I. Rich. M.S.	Associate Professor of Education
Floisa Rivera-Rivera Ph.D	Associate Professor of Spanish and French
	Associate Professor of English
	Associate Professor of French
	Assistant Professor of Social Studies
	Associate Professor of Education
	Assistant Professor of Music
	Associate Professor of Education
	Professor of Speech
	Professor of Psychology
	Associate Professor of Education
	Professor of Mathematics
	Assistant Professor of French and German
	Assistant Professor of French
	Professor of Health and Physical Education
	Professor of Business Education
_	Associate Professor of Fine Arts
	Professor of Health and Physical Education
	Professor of Education
· ·	Associate Professor of Music
	Associate Professor of Mathematics
	Assistant Professor of Education
*	Associate Professor of Fine Arts
Frederick H. Young, Ph.D.	Professor of English
Louis E. Zerbe, M.Mus.	Associate Professor of Music

#### **EMERITUS FACULTY**

Hower A Caroma Dh D	President Emeritue
Harry A. Sprague, Ph.D.	President Emeritus
Clyde M. Huber, Ph.D.	Dean Emeritus
Lawrence H. Conrad, A.M.	Professor Emeritus of English
David R. Davis, Ph.D.	Professor Emeritus of Mathematics
Edwin S. Fulcomer, Ed.D.	Professor Emeritus of English
Elwyn C. Gage, Ph.D.	Professor Emeritus of Social Studies
Charles E. Hadley, Ph.D.	Professor Emeritus of Biology
Edna E. McEachern, Ph.D.	Professor Emeritus of Music
Harley P. Milstead, Ph.D.	Professor Emeritus of Geography
Rufus D. Reed, Ph.D.	Professor Emeritus of Chemistry
John J. Rellahan, Ph.D.	Professor Emeritus of Economics
Kenneth O. Smith, Ph.D.	Professor Emeritus of Physics
W. Scott Smith, Ph.D.	Professor Emeritus of Education

#### GENERAL INFORMATION

#### History and Development of the Graduate Division

In 1908 Montclair State College began its teacher-education program as a two-year normal school. In 1927, by action of the State Board of Education, it was changed to a State Teacher College with four-year curricula leading to a Bachelor of Arts degree and certification to teach in the secondary schools of the State. Extension courses were instituted in 1929, and summer sessions in 1930, to enable teachers who held only a diploma and a teacher's certificate to obtain a Bachelor's degree.

On July 1, 1958, by action of the State Board of Education, the name of the College was changed to Montclair State College. Its function, however, continues to be that of a professional school devoted primarily to serving the interests of secondary education in this State.

The State Board of Education authorized, in June, 1932, the establishment of appropriate graduate programs leading to the Master of Arts degree, which the College was empowered to grant. Graduate studies were first offered in the summer of 1932 and have been continued in all regular and summer sessions since that time.

In 1937, the Middle States Association reviewed and accredited the graduate program and has since done so regularly, as has the American Association of Colleges for Teacher Education, whose function has been assumed by the National Council for the Accreditation of Teacher Education. In 1948, the Graduate Committee was formed as a sub-committee of the Administrative Council to coordinate the graduate work of the various departments participating in it and to establish policies and standards appropriate to Master's degree programs. Since 1956, this Committee, under the title of Graduate Council, has assumed greater responsibility for the conduct of graduate work.

The last decade has witnessed a rapid but orderly expansion of the entire College. The construction of additional modern physical facilities, the development of a graduate faculty as an identifiable entity, and the establishment of new and appropriate degree programs, have kept pace with both the increasing graduate student enrollment and the educational needs of New Jersey.

Currently there are more than 2,000 students registered in the various courses of this division, with approximately 1,000 students matriculated in seventeen different programs leading to the Master of Arts degree.

#### Professional and Academic Status of the College

#### ACCREDITATION AND MEMBERSHIPS

Montclair State College is a fully accredited member of the Middle States Association of Colleges and Secondary Schools. In addition, the National Council for the Accreditation of Teacher Education has granted it full accreditation for the preparation of elementary and secondary school teachers, and school service personnel, with the Master's degree as the highest degree approved. Credits are exchangeable among colleges and universities which are members of regional and national associations to the extent to which the degree requirements of individual institutions permit the acceptance of transfer credit.

The College holds memberships in the American Association of Colleges for Teacher Education, the American Council on Education, The Association of State Colleges and Universities, and the New Jersey Association of Colleges and Universities. Graduates of the College are accepted for membership in the American Association of University Women.

#### The College Library

The air-conditioned Harry A. Sprague Library was opened in the Fall of 1963. Its three floors are planned to accommodate 800 students and a book collection of 150,000 volumes. Faculty carrels, individual study desks, typing areas, and conference rooms are also provided. A Curriculum Laboratory houses school textbooks and courses of study for elementary and secondary school subjects.

#### Purpose of Graduate Study

Montclair State College is a professional school devoted primarily to the interests of secondary education. The major goal of all its courses is the development of the competence of the teacher as a professional person.

#### Master's Degree Specialization Areas

In addition to the major in Teaching, graduate work is offered in the following major areas: Administration and Supervision, Business Education, Distributive Education, English, Fine Arts, Foreign Languages (French and Spanish), Health Education, Home Economics, Industrial Arts, Mathematics, Music, Personnel and Guidance, Physical Education, Reading, Science, Social Studies, Speech Arts, and Speech Therapy.

#### The Graduate Point of View

The objective in each of the Master's degree curricula is to develop a greater degree of professional competence in the basic subject matter of the area of specialization, knowledge of the current literature relating to it, and ability to use and interpret the results of the reported investigations of others.

The various degree programs provide the background and tools needed for study in a given area. Through the basic research courses and other tasks, the student finds opportunities for personal and professional growth. There is also in each program a chance for the student to enrich his general education and basic professional background through appropriate elective experiences.

#### The Administration of the Master's Degree Programs

In the organization of the College, the administration unit which is responsible for the proper functioning of Master's degree curricula is the Graduate Council. Its membership consists of those administrative officials of the College who are ex-officio closely associated with graduate studies, together with others who represent the various departments offering Master's degree programs. Departmental representatives on the Council are appointed by the President of the College, upon the recommendation of the department.

The Council's chief function is to develop the basic standards, policies, and procedures which govern the granting of Master's degrees, to approve new programs, and to engage in a continuous evaluation of all Master's degree work.

Graduate program policies and procedures are administered by the Chairman of Graduate Studies in cooperation with the various Master's degree program advisors and the Dean of the College, who supervises the activities of the Graduate Division and is responsible to the President of the College. All programs, policies, and procedures are subject to approval by the State Board of Education.

#### **Graduate Faculty**

Faculty members serving the Graduate Division are with few exceptions members of the full-time staff of the College. Those who have attained the rank of associate professor or higher, or have an earned doctorate, are eligible for appointment to the graduate faculty. In addition to those with such evidence of scholarship, a limited number of experienced teachers who have demonstrated excellence in classroom instruction are assigned to teach graduate classes. While the graduate faculty is an identifiable entity, its members are not restricted to advanced instruction. Graduate courses taught constitute only a part of the regular schedule of those participating in this program.

#### **Graduate Students**

The courses are organized to serve the interests of three specific groups of students:

- Group I Those who wish to matriculate for the degree of Master of Arts: teachers-in-service, as well as those interested in personal and professional growth who hold a Bachelor's degree from an accredited college or university, have a high scholastic average, and are fully certified New Jersey teachers.
- Group II Those who wish to matriculate for the degree of Master of Arts with a major in Teaching. These students must hold a Bachelor's degree, have a high scholastic average, and plan to pursue certification to teach in New Jersey secondary schools or in certain special subject fields.
- Group III Those who do not wish to matriculate for the degree of Master of Arts: students who hold graduate degrees and wish to continue their professional preparation; college graduates who wish to take courses leading toward secondary school certification; students who are matriculated for advanced degrees in other colleges and who plan to transfer their credits; and special students taking courses for cultural purposes without reference to credit.
- Group IV Senior-graduate students (Montclair State College seniors only) currently enrolled in the College who have good academic records (2.67 or better) and who are within sixteen semester hours of graduation may be permitted to take a maximum of eight semester hours of senior-graduate work (courses numbered 400-499) concurrently with any remaining semester hours to meet the requirements of the Bachelor's degree and prior to graduation. Applicants should obtain the appropriate application form from the Graduate Office. These applications are then presented to the Registrar, the chairman of the department concerned, and the Associate Deans. Students should then register for this special work in the office of the Director of the Evening Division. This does not constitute application for the Master's degree.

#### Admission and Matriculation for the Master's Degree

1. The applicant for admission to any of the Master's degree programs should be a graduate of an accredited college or university and must present evidence of his qualifications for advanced study as shown by a high scholastic record, professional teacher-education training, and experience. The College may require an applicant with a

doubtful undergraduate record or a Bachelor's degree from a non-accredited institution to take qualifying examinations, such as the Graduate Record Examination or any other suitable test it may consider necessary, to determine a student's acceptability for matriculation in the Master's degree program of any department.

- 2. It is in the student's own interest that he determine his eligibility for matriculation before initiating a program of graduate study. However, his formal matriculation (i.e., official acceptance in writing by the Graduate Office in a program leading to the Master's degree) may be deferred for good reason until no more than eight semester hours of graduate credit have been earned.
- 3. Prior to admission and matriculation, each student indicates the Master's degree area in which he will complete such courses as are prescribed. Upon his formal acceptance, an official work program is made out in conference with a departmental advisor appointed for this purpose.
- 4. To be eligible for matriculation in a major subject area, a student must present evidence, in the form of an official undergraduate transcript, of work in the undergraduate major as indicated in the departmental statements describing the various programs.
- 5. Since the College is a professional institution, applicants for matriculation in these programs must posses a valid certificate to teach the subject of specialization in the schools of the State of New Jersey. Applicants who are not so certified should study the information entitled "Certification" listed elsewhere in this catalog.
- 6. To be eligible for matriculation in the several professional education programs in the Department of Education, except the major in Teaching, it is required that a student be certified to teach in New Jersey and have some successful teaching experience. Two full years of experience in grades 7-12 are required for acceptance in the program in Administration and Supervision, and one full year of teaching is required for Personnel and Guidance.

#### Steps in the Matriculation Process

- 1. The applicant secures an application form in the Graduate Office which must be completed and returned to that office together with, a) a personal statement of his objectives as required on the application form; b) a check or money order for the required application fee; and c) a photocopy of his teaching certificate.
- 2. The applicant will have his college send official transcripts of all college credits (if the applicant is not a graduate of Montclair) to the Associate Dean, Graduate. The completed application, fee, and official transcripts should be on file in the Graduate Office before the dates listed on the College Calendar. (See page 6).

- 3. A review of the student's undergraduate record and other qualifications will be made in the Graduate Office. The applicant will then be notified as to what action has been taken on his application.
- 4. The applicant who meets admission requirements will next confer with the graduate advisor in the department in which he expects to do his work; when he is eligible for matriculation, the advisor will develop a formal program of courses with him.
- 5. A final conference with the Associate Dean, Graduate, may be arranged, if necessary. Following this, the applicant will be advised in writing of the decision of the Graduate Council, and, if accepted, he will be furnished with a statement of the course of study (Official Work Program) to be completed within a six-year period.
- 6. Final action on all applicants is vested in the Graduate Council. For good reason, legitimate adjustments may be made at any time in the student's original program, with the approval of his program advisor and confirmation of this action by the Associate Dean, Graduate. (Amendments of this nature are made on an appropriate form available in the Graduate Office.)

#### Types of Admission in the Degree Programs

- 1. Regular admission for applicants eligible to be fully matriculated.
- 2. Conditional (granted because specific undergraduate course deficiencies exist, or for other reasons).

#### Procedure for the Admission of Veterans

A prospective student with the special classification of a veteran should determine his admission status with the Graduate Office before making application for a Certificate of Eligibility for matriculation.

### Master's Degree Program Pattern (all majors except Education Department)

The curriculum pattern for each of the Master's degree programs includes experiences in three areas: 1) Basic professional education; 2) general education; and 3) subject matter specialization.

I. General Education—Requirements for the Master's Degree insure that students undertake some broadening experience which will extend their studies outside of their speciality and even their profession. These graduate general education courses, to be chosen under careful guidance in accordance with the student's background, are designed to show the interrelationships of the major fields of learning. Courses selected must be outside the student's undergraduate major, graduate major, and the Education Department.

General Education Requirement: minimum 6 credits; maximum 12 credits.

II. Basic Professional Education—This portion of the graduate program is devoted to developing the general professional consciousness as well as the competence of each student. This is accomplished by studies necessary for all teachers—regardless of their field of specialization—relating to the profession as a whole as it relates to children and the society in which it functions. Students must select courses from the following list to satisfy the Basic Professional Education requirement.

Required of all M.A. candidates:				
Ed. 503 Methods and Instruments of Research		2	s.h.	
		_	0.11.	
Elect courses from the following: Graduate Courses:				
		_	1	
Ed. 500 Recent Trends in Secondary School Methods			s.h.	
Ed. 514 School Law		2	s.h.	
Ed. 550 Guiding the Reading Interests of Secondary		2	a h	
School Students  Ed. 560 Advanced Educational Psychology			s.h.	
Ed. 560 Advanced Educational Psychology  Ed. 561 Child and Adolescent Development			s.h.	
Ed. 562 Principles of Mental Hygiene			s.h.	
Ed. 566 Psychology and Education of the Gifted			s.h.	
,		_	5.11.	
Senior-Graduate Courses:		_		
Ed. 406 Educational Sociology		3	s.h.	
Ed. 408 Selection and Utilization of Audio-Visual				
Materials			s.h.	
Ed. 453 Social Psychology			s.h.	
Ed. 492 Comparative Education		3	s.h.	
Graduate and Senior-Graduate Related Courses:				
A student may receive credit for one or the other courses selected				
from each pair, but not both.				
Ed. 501 Tests and Measurements in Secondary				
Education—or		2	s.h.	
Ed. 491 Measurement and Evaluation in Teaching				
		3	s.h.	
Ed. 564 Psychology and Education of Exceptional				
Children: Physical and Mental—or		_	s.h.	
Ed. 452 Psychology and Education of the Handicap	ped	3	s.h.	
Ed. 565 Psychology and Education of Exceptional		-	. 1.	
Children: Social and Emotional—or			s.h.	
Ed. 452 Psychology and Education of the Handicap Ed. 580 Principles and Techniques of Guidance—or			s.h.	
Ed. 580 Principles and Techniques of Guidance—or Ed. 451 Guidance for the Classroom Teacher			s.h.	
Basic Professional Education Requirement: minimum 6 credits; maximum, 9 credits.				
maximum, 9 cicuits.				

III. Specialization—A considerable portion of the graduate program is devoted to increasing the student's competence as a teacher. Studies in this category include additional work in the content of his major and related fields, and in the utilization of this content in the public school curriculum.

It is important that each student have experience in the systematic acquisition, preparation, and analysis of information relevant to some problem in his field of specialization. The candidate is required to show competence in executing and reporting an independent research study, field experiment, master's thesis, or similar creative activity. Opportunity for this activity is provided in the specialization aspect of the student's program.

The student may choose to satisfy this requirement in one of two ways:

- 1. A written report of superior quality of an approved study or equivalent creative production—in connection with one of the seminars in his program. The project will be directly related to the purposes of the program in which the student is enrolled, or
- 2. A formal research thesis carried on under the direction of a thesis advisor. Students wishing to complete a formal thesis will register and may earn four semester hours of credit for this activity.

Specialization Requirement: minimum, 11 credits; maximum, 20 credits.

TOTAL MASTER OF ARTS ...... Minimum: 32 s.h.

#### Graduate Research and the Master's Thesis

Courses and seminars will introduce the student to research methods in the several disciplines and indicate what and where are the basic sources of information. They will require him to survey the professional literature of his major. An advanced study, essay, or research report is required in all the Master's degree programs by means of the departments' seminars.

Creative work, or distinguished performance involving intellectual, as well as, technical mastery, may be substituted in the programs in the arts, music, literature, etc. The essential element in this type of experience is independent work in depth by the student, whatever its form. Whether or not it is carried out in connection with courses is immaterial if the investigation conducted under faculty supervision requires the student to work independently on his own and to demonstrate his capacity to find, assess, organize, treat, and interpret his materials in a scholarly manner.

As the basic style and guide for research reports, investigations, and theses, the Graduate Council has adopted William G. Campbell's Form and Style in Thesis Writing.

#### The Master's Thesis

To encourage scholarly students to develop a thesis, a department may accept it as equivalent to the required seminar, and/or in lieu of all or part of the final comprehensive examination. Students writing a thesis must receive the approval of their departmental advisor and the Associate Dean, Graduate, and must register for the course, Graduate 600, Master's Thesis, for four semester hours. Information which will aid students submitting a Master's thesis is available in the Graduate Office.

Students are expected to complete the thesis within one calendar year. An extension of time may be granted by the Associate Dean, Graduate, after consultation with the student's advisor. If granted, the student must re-register for Graduate 600 on a no-credit basis and pay a fee for two semester hours. This extension will be for six calendar months. The thesis must be submitted six weeks prior to commencement.

#### **Certification Students**

Students holding Bachelor's degrees from the other colleges who plan to take courses leading to certification for secondary school teaching should:

- 1. Follow the procedure outlined under the section SPECIAL PROGRAMS WITH A MAJOR IN TEACHING.
- 2. Direct questions regarding certification to the Certification Advisor at the College; pre-registration advisement, by appointment, is recommended.
- Consult Evening Division and Summer Session announcements for further information

## Certification Students and the Master's Degree (all majors except Teaching)

Students holding Bachelor's degrees from other colleges must be fully certified to teach in the area of their major specialization by the time the Master's degree is conferred. Students should have completed their supervised student teaching or have had one year of successful teaching experience under provisional certification before they can matriculate for the Master's degree.

Students who are interested in correlating their work for certification with some work toward the Master's degree should arrange an advisement interview with the College Certification Advisor.

#### Certification Students and Student Teaching

Graduates of other colleges who wish to do their student teaching through Montclair State College should obtain a statement from the Director of Student Teaching and Placement outlining the conditions under which it can be done. This group will be expected to meet the standards established for Montclair State College students before being assigned for student teaching.

Students who desire to meet the State requirement in supervised student teaching must be approved by the Director of Student Teaching, after which approval they will register for this course.

#### Special Programs with a Major in Teaching

These Certificate and Master's degree programs are designed especially for college graduates who wish to prepare to become secondary school teachers, or teachers of subjects such as art and music in the elementary and secondary grades. The content, organization, materials, and methods of these courses are designed with the consideration of the student's maturity, academic background, and experience.

#### Admission to Certificate\* or Degree Programs

Admission is restricted to those selected graduates of accredited colleges who indicate high potential for teaching, and to in-service teachers with emergency or provisional certificates.

College graduates not employed as teachers will be screened for admission with due consideration to:

- a. Suitability or character and personality for teaching
- b. Health examination
- c. Speech and writing competence
- d. Competence in teaching field, based upon undergraduate grades of B- or better (2.67 on a 4 point scale). Students who present lower grade point averages must also present scores earned on the Graduate Record Examination Aptitude Test.

In-service teachers holding emergency or provisional certicates, employed by local school districts, will be admitted to the program upon application, and agreement by the employing superintendent of schools to enter into a cooperative program of supervision of the student in connection with course Education 595E, 595F Supervised Teaching Seminar. During the first semester these students will complete the application procedure regarding character, health, speech, and writing, and preparation in subject-matter field. When the student completes six

<sup>\*</sup>Students who successfully complete the Certificate Program will be recommended for appropriate New Jersey teacher certificates.

to ten semester hours work at Montclair, a decision will be made regarding matriculation for the M.A. degree. If as a result of failure to satisfy the screening criteria or unsatisfactory performance in the program, it is considered necessary to withdraw a student, conferences will be arranged with the student and the employing superintendent as early as possible.

MASTER'S DEGREE PATTERN: MAJOR IN TEACHING SECONDARY (7-12) AND SPECIAL FIELD (K-12)

#### (1) Basic Background Requirements

A student must have a minimum of thirty graduate or undergraduate semester-hour credits in general background courses distributed in at least three of the following fields: English, Social Studies, Science, Fine Arts, Mathematics, and Foreign Languages. Six semester-hour credits in English and six semester-hour credits in Social Studies will be required.

#### (2) Subject-Matter Specialization Requirements

A student must have a subject-matter background suitable in extent and coverage to constitute a teaching major in at least one field. Students whose subject-matter background is deficient will be required to remove the deficiencies prior to recommendation by the College for a teacher's certificate or a Master's degree. Additional work that is needed may be taken at either the graduate or undergraduate level. Write to the Graduate Dean for details.

#### (3) Professional Requirements

Students take the following courses (course descriptions and details may be found in the Education Department section of this catalog): Education 595A, 595B, 595C, 595D, 403 or 595E and 595F, 560, 561, 564 or 565 or 566. Courses may be waived that have been completed at either the graduate or undergraduate level, prior to enrollment in the program. However, no student will be recommended for a certificate or a Master's degree who has not completed Student Teaching or the Supervised Teaching Seminar at the College.

TOTAL PROFESSIONAL PROGRAM FOR CERTIFICATION 26 s.h.

#### (4) Additional Courses for M.A. Degree

#### Required Courses

Education 595G and 595H	6	s.h.
Elective Courses	8	s.h.

Students may choose, with advisement, additional electives in general education or in the subject-matter specialization requirement.

#### 24 / GENERAL INFORMATION

Selected matriculated students may be invited to develop a Master's thesis of quality under the guidance of a thesis advisor for which four semester hours of elective credit will be allowed.

TOTAL MASTER OF ARTS (Major in Teaching) Minimum: 40 s.h.

(Students must complete at least 32 semester hours of graduate work in the Montclair State College Program)

#### Requirements, Policies, and Procedures

Following is a list of the most important requirements, policies, and procedures for Master of Arts degree candidates. Questions pertaining to this list should be addressed to The Associate Dean, Graduate.

#### (1) Application for Conferment of the Degree

Candidates must file with the Registrar an application for conferment of the degree as follows:

Nov. 15, for the following June commencement Mar. 15, for the following September commencement

Application blanks for this purpose may be secured from the Registrar. Responsibility for the request rests with the candidate. This is of special significance to the teacher-in-service who may have distributed his graduate work over five or six years.

#### (2) Attendance at Commencement

Attendance is required at commencement, unless permission for graduation in absentia is granted by the President of the College.

#### (3) Basic Professional Education

Six to nine semester hours of the required total semester hours must consist of basic professional education courses in the Department of Education. One two-semester hour course in this group, Education 503, Methods and Instruments of Research, is required of all students matriculated in the Graduate Division and must be taken in residence. The Major in Teaching program requires a three semester-hour research course, Education 595G, "Action" Research for Teachers, and must be taken in residence.

#### (4) Certification Evidence

To receive final approval by the Registrar as a candidate for the degree, the student must have evidence in his official file in the Graduate Office to indicate that he has met the certification requirements for the program for which he was matriculated. This evidence may consist of either a photocopy of the essential certificate to teach, or a letter of eligibility.

#### (5) Change of Schedule

No student will be permitted to change his scheduled courses without the approval of his advisor and the Associate Dean. The deadline for making changes is the last day of the late registration period. To change from "auditor" to "credit," or vice versa, a student must make formal application not later than the mid-point in the semester. Forms are available in the Graduate Office.

#### (6) Comprehensive Examination

A comprehensive departmental examination or its equivalent is required in all departments. This examination may be written and/or oral. The oral phase of the examination will be on an individual basis. The examination is given during the Spring semester, prior to graduation, by the department in which the student does his major work. Students who fail the departmental comprehensive examination are permitted to retake this examination after a period of one year has elapsed. Students may be required to register for additional work in the preparation for the re-examination. Students may not take the examination more than three times. (Consult the Evening Division announcements for dates.)

#### (7) Course Numbering System

Courses in the 500 and 600 series are open only to graduate students. Those in the 400-499 series and listed in this bulletin may be selected by graduate students for graduate credit. Students must have completed the prerequisites indicated in the course descriptions.

#### (8) Course Offerings and Schedules

Regular bulletins are published for the information of those who wish to attend part-time, extension, or summer session courses. These contain a list of course-offerings, time of class meetings, room assignments, and instructors for the scheduled classes. Other information may be obtained from the Associate Dean, Graduate, Montclair State College, Upper Montclair, New Jersey.

#### (9) Departmental Seminar

Each candidate must complete an approved seminar in the department of his major subject. Education 503, *Methods and Instruments of Research*, is a prerequisite for this required seminar.

#### (10) Fees and Charges

**Tuition** 

New Jersey Residents
and Teachers ...... per semester hour of credit \$16.00

Non-Residents per semester hour of credit	\$18.00
Service Charge per semester hour of credit	.50
Registration (non-refundable)	2.00
Late Registration (non-refundable)	5.00
Application for admission to a program	
(non-refundable)	5.00
Transcript (Inquire in Registrar's Office) each copy	1.00
Supervised Student Teaching (if required)	60.00
(This fee is in addition to the credit fees stated above)	
Dormitory (including room, breakfast, lunch, and dinner	
for a summer session) per week	22.75
All checks should be made payable to Montclair State All charges are payable during the registration period. These charges are subject to revision.	College.

#### (11) General Education

Six to twelve semester-hours of the required total semester hours must consist of courses in general education.

#### (12) Grades to be maintained

An average grade of "B" or better is required for work submitted for the Master's degree. No graduate credit is given for work below "C."

#### (13) Grading System

Marks indicating degrees of achievement in the various courses are given in letters A, B, C, D, and F.

A-Excellent

B-Good

C-Fair

D-Poor (No "D" credit may be counted toward the Master's degree)

F-Failure

Inc.—Incomplete Work\*

WP-Withdrawn, passing

WF-Withdrawn, failing

#### (14) Graduate Level Courses

The majority of the courses taken or credits earned should be on the 500-600 level.

<sup>\*</sup>Where a student has had an unavoidable absence, or presents other good reasons in accord with approved policy, a course may be marked "Incomplete" at the end of a semester or summer session. This mark must be removed by a final grade, or the course cannot be credited and the mark becomes "F" automatically. Incomplete grades assigned during the spring semester or summer session must be cleared before November 15. Fall semester incomplete grades must be cleared before April 15.

#### (15) Master's Degree Credit

The responsibility of taking the right courses for the program being pursued rests with each student. It is important that at each registration period the student bring with him his official work program, together with his transcripts of graduate work taken at this College, so as to avoid taking courses that cannot be counted toward the degree.

#### (16) Number of Semester Hours: Minimum

A minimum of thirty-two semester hours of graduate credit is required in all departments. Additional hours may be added to compensate for any deficiencies found in the applicant's undergraduate record. A minimum of forty semester hours is required in the program with a major in teaching.

#### (17) Residence Requirements

- a. A minimum of thirty-two semester hours of graduate work in residence is required except as noted in item 24.
- b. The student must attend the College as a full-time graduate student for at least one summer session (six semester hours), or one regular semester (twelve semester hours) to meet the residence requirements.

Fully employed teachers are encouraged to restrict the graduate work carried during the year, and to take advantage of the course offerings in the summer session when their normal professional responsibilities will not interfere with the study expected of advanced students.

#### (18) Restrictions for Graduate Program Credit

- a. No credit is granted toward the Master's degree for courses with a grade below "C," or for certain specifically designated basic courses on the 400 level which are required for initial certification.
- b. No credit is granted toward the Master's degree for courses taken more than ten years prior to the date on which the student expects to receive his degree.
- c. No more than eight semester-hours of graduate credit taken prior to matriculation, or more than six semester hours of graduate credit in extension (off-campus courses), may be credited toward the Master's degree.
- d. No graduate credit is granted retroactively for work taken in excess of undergraduate degree requirements.
- e. No graduate credit is allowed for concurrent registration (enrollment) in other colleges without the approval of the Graduate Dean.

- f. No graduate credit is granted for courses in which a student who has been an auditor, decides to take the course for credit, without official permission. Such changes must be made before the mid-point of the semester.
- g. Since some course numbers have been changed, responsibility for avoiding duplication is placed upon the student. No course once taken for credit may receive credit a second time under another number.

#### (19) Retention Standard

The Associate Dean, Graduate, and the student's program advisor may, for good reason, revoke the matriculated status of any one who is found to lack the qualifications of personality, integrity, temperament, emotional adjustment, or physical stamina, or after it has been established that there is evidence of serious unprofessional conduct.

A student who does not maintain an acceptable standard of scholarship (an average of "B" or better) will be placed on probation. If it then becomes apparent that he is unlikely to achieve an acceptable standard, he will lose his status as a matriculated student.

#### (20) Specialization

Each major department requires eleven to twenty semester hours of graduate work in the area of specialization.

#### (21) Student Load

Graduate work should involve careful and intensive study with ample time to explore areas which may warrant study. Twelve to sixteen hours of work per semester is considered a full-time program for the graduate student in residence.

For teachers, or others employed full time, six hours of work in any one semester shall be the maximum load, with four semester hours recommended. In the regular six-week summer session, the maximum load shall be eight semester hours. However, the Graduate Council strongly recommends that the student consider six semester hours of work a full program.

#### (22) Thesis

Four of the total credits can be satisfied by a thesis which meets the approval of the Graduate Council. In some departments the thesis may be offered in place of the written comprehensive examination, and/or the oral examination.

#### (23) Time Limit

Work for the Master's degree must be completed within six years after the date of matriculation. If an extension of time is required,

a request for such extension must be filed with the Associate Dean, Graduate. The student's progress will then be reviewed and evaluated in accordance with the requirements for the degree as stated in the most recent Graduate Bulletin and with the established policy for this type of reinstatement. The policy statement may be obtained from the Graduate Office.

### (24) Transfer Credit

With the approval of the student's program advisor and the Associate Dean, Graduate, a graduate of an accredited college or university who has matriculated on or after April 12, 1962, may transfer some graduate credits. The maximum amount of credit which may be accepted is eight semester hours. The usual procedure is to arrange in advance for this privilege, and to make application for acceptance on a form available in the Graduate Office.

# (25) Withdrawal from a Course

A written notice filed in the office of the Evening Division is required. (Refunds are computed from the date of receipt of such written notice.) Students who do not submit a written notice will receive the mark of "F" in those courses which they cease to attend. Non-attendance at classes or oral or written notification to the instructor does not constitute a formal withdrawal.

Students who withdraw after the mid-point in the semester will receive an automatic grade of "F," except in certain very exceptional cases that receive approval.

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### DEPARTMENT OF BUSINESS EDUCATION

Graduate Advisor: DR. LOUIS C. NANASSY

The graduate work in the Department of Business Education is designed to prepare teachers of business education for administrative, supervisory, specialized work, or master teaching in the field of business education and distributive education. In order to attain these objectives the candidate has an opportunity to supplement his undergraduate program and to explore advanced areas of work in accordance with his individual background, experience, achievement, and professional needs.

Graduate work toward the Master of Arts degree in Business Education presupposes the completion of an undergraduate major in business or distributive education, or its equivalent. The undergraduate major is based on the requirements as established by the New Jersey State Board of Education. For further details see the Undergraduate Bulletin.

All candidates for the Master of Arts degree in Business Education must pass a comprehensive oral and written examination before they are granted the degree. This examination is given in the Spring Semester for those candidates anticipating graduation in June or September. It is general in nature and is intended to test the candidate's maturity of thought with respect to business and distributive education.

### REQUIREMENTS FOR THE M.A. DEGREE IN BUSINESS EDUCATION

I.	Ge	neral	Educa	tion (see Master's Degree Program Pattern)	6-12	s.h.
I.	Bas	sic Pr	ofessio	nal Education (see Master's Degree Program Pattern)	6-9	s.h.
I.	Spe	ecializ	ation	1	11-20	s.h.
	A.	Requ	ired C	ourses		
		B.E.	501.	Principles and Problems of Business Education	2	s.h.
		B.E.	502.	Evaluation of Current Literature in Business Educati	on 2	s.h.
		B.E.	603.	Research Seminar in Business Education	2	s.h.
		Requ	iired, a	at least two of the following courses:		
		B.E.	511.	Improvement of Instruction in Bookkeeping, Accounts and Business Arithmetic		s.h.
		B.E.	512.	Improvement of Instruction in General Business Subje	cts 2	s.h.
		B.E.	513.	Improvement of Instruction in Stenography and Secretarial Practice	2	s.h.
		B.E.	514.	Improvement of Instruction in Typewriting and Clerical Practice	2	s.h.
		D.E.	551.	Improvement of Instruction in Distributive Educati	on 2	s.h.
	B.	Elect	tives in	Business Education and/or Distributive Education	10	s.h.
				Minimum	: 32	s.h.

### REQUIREMENTS FOR THE M.A. DEGREE IN DISTRIBUTIVE EDUCATION

- I. General Education (see Master's Degree Program Pattern) 6-12 s.h.
- II. Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h.

#### A. Required Courses

Holders of a New Jersey teacher's certificate in the field of business education who complete the following required specialization courses will be eligible for certification in Distributive Occupations. Courses (or their equivalents) will be waived that have been completed at either the graduate or undergraduate level, prior to admission to the program.

When courses are waived, students seeking a master's degree can fulfill the specialization requirement by substituting courses from list "B. Electives in Distributive Education."

D.E.	414.	Merchandising (Marketing & Distribution)	2	s.h.
D.E.	452.	Principles of Vocational Education	2	s.h.
D.E.	453.	Curriculum Development in Distributive Education	2	s.h.
D.E.	454.	Principles & Methods in Distributive Education	2	s.h.
D.E.	455.	Coordination of Distributive Education	2	s.h.
D.E.	456.	Organization and Administration of Distributive		
		Education	2	s.h.
D.E.	551.	Improvement of Instruction in Distributive Education	2	s.h.
D.E.	552.	Advanced Salesmanship	2	s.h.
D.E.	553.	Trends in Retail Distribution	2	s.h.
B.E.	603.	Research Seminar in Business Education	2	s.h.

Work Experience—Certification for Distributive Occupations requires two years of approved work experience in distributive occupations. This requirement may also be fulfilled by successful completion of the following:

Full-time coordinated and supervised work experience in an approved work station for the months of July and August (minimum of 8 weeks is required for D.E. 450 and also for D.E. 451). One evening class session a week is scheduled with the work program to discuss the progress and program.

#### B. Electives in Distributive Education

D.E. 406.	Advertising	2	s.h.
D.E. 417.	Marketing	2	s.h.
D.E. 418.	Retail Store Management	2	s.h.
D.E. 419.	Merchandise Information	2	s.h.
D.E. 422.	Visual Merchandising	2	s.h.
D.E. 423.	Buying for Distribution	2	s.h.
D.E. 522.	Advertising Media	2	s.h.
D.E. 554.	Workshop in Problems of Distributive Education	2	s.h.
D.E. 555.	Credits and Collections	2	s.h.
D.E. 556.	Retail Personnel Administration	2	s.h.
D.E. 557.	Sales Management	2	s.h.
D.E. 558.	Executive Leadership in Retailing	2	s.h.
	Development of Retail Training Programs		

Minimum: 32 s.h.

#### GRADUATE COURSES IN BUSINESS EDUCATION

### B.E. 501. Principles and Problems of Business Education

2 s.h.

Survey of basic principles and practices of business education. Topics include history of business education, objectives, relationship of business education to general education, trends and problems in the field.

#### B.E. 502. Evaluation of Current Literature in Business Education 2 s.h.

Introduces the literature of business education to the graduate student from a research point of view. Current literature from all sources—articles, research papers, books—are evaluated, using selected criteria for such evaluation.

#### B.E. 503. The Business Education Curriculum

2 s.h.

Study of curricula in business education for various levels and types of schools. Evaluation of specific programs; development of improved curricula.

#### B.E. 504. Evaluation and Measurement in Business Education

2 S.n.

Constructing, administering, interpreting, and evaluating all types of testing and evaluation materials in business subjects.

#### B.E. 505. Administration and Supervision of Business Education

2 s.h.

Study of problems of organizing, directing, and supervising business education programs at the secondary school and collegiate levels.

# B.E. 511. Improvement of Instruction in Bookkeeping, Accounting, and Business Arithmetic 2 s.h.

Study of objectives, content, methods, teaching aids, and evaluation procedures. Prerequisites: Undergraduate methods course in bookkeeping and teaching experience.

#### B.E. 512. Improvement of Instruction in General Business Subjects 2 s.h.

Study of objectives, content, methods, teaching aids, and evaluation procedures for courses such as general business, economic geography, business law, and consumer education. Prerequisites: Undergraduate methods course in general business and teaching experience.

# B.E. 513. Improvement of Instruction in Stenography and Secretarial Practice 2 s.h

Refinement of teaching and personal skills, introduction to the latest instructional equipment and method are emphasized through demonstration, participation, and reading. Prerequisites: Undergraduate methods in stenography and teaching experience.

# B.E. 514. Improvement of Instruction in Typewriting and Clerical Practice

2 ch

Emphasis is placed on refinement of teaching and personal skills in typewriting and business machine operation. Latest recommended teaching techniques are examined, demonstrated, and evaluated. Prerequisites: Undergraduate methods in typewriting and teaching experience.

#### B.E. 521. Business Management Problems

2 s.h.

The problems approach is used in this advanced course in considering such topics as business ownership, finances, location and layouts, purchasing, personnel, and managerial controls.

#### B.E. 523. Auditing

2 s.h.

This course develops the meaning and techniques of auditing procedure. It includes practice in the fundamental mechanics of auditing as well as in the making of the formal report on an audit, Prerequisite: 8 semester hours of accounting.

#### B.E. 524. Advanced Tax Problems

2 s.h.

Preparation of tax returns for partnerships, trusts, corporations, and complicated individual tax returns. Also inheritance taxes, gift taxes, social security taxes, and tax benefits and returns required under social security tax law.

#### B.E. 525. Accounting Systems and Data Processing

2 s.h.

Deals with analysis of accounting systems and the organization of accounting information for use with manual and automated methods.

#### B.E. 526. Advanced Business Law Cases

2 s.h.

Designed to furnish a broad understanding and background in areas requiring considerable training to be effective in the classroom. Cases are concerned with the topics of contracts, negotiable instruments, insurance, bailments, carriers, sales, property, landlord and tenant, torts, and business crimes. Prerequisite: 6 semester hours of business law.

# B.E. 527A, B, C, D. Workshop in Clerical and Secretarial Practice, Advanced Stenography, Advanced Typewriting, Office Machines 2 s.h. each

These workshops, which may run simultaneously, provide opportunity for the study, planning, and development of teaching materials and projects fitted to the particular situation in which the person is teaching. Instruction is on an individual and small-group basis with occasional seminar meetings of the entire group. Prerequisite: Teaching experience in the field.

#### B.E. 528. Field Studies in Business Education

2 s.h.

Provides opportunity for the classroom teacher to visit and evaluate some of the practices of business offices, industries, and retailing organizations located in the metropolitan area. Experience is gained in planning, conducting, and follow-up of field trips.

#### B.E. 529. Audio-Visual Aids in Business Education

2 s.h.

This course develops knowledge and skill in using the many audio and visual aids available in teaching business subjects. Opportunity is provided for developing and constructing teacher-made audio-visual aids.

#### B.E. 603. Research Seminar in Business Education

2 s.h.

Includes study and analysis of significant research studies in business education, investigation of procedures in educational research, and techniques of thesis writing. Outline of research project approved in B.E. 502 is developed and completed as partial requirement of this seminar. Prerequisite: Education 503.

#### SENIOR-GRADUATE COURSES IN BUSINESS EDUCATION

#### B.E. 404. Business Economics

3 s.h.

Although the nature and scope of economics is presented, this course deals primarily with the business aspects of economics as related to the free enterprise system, money credit and banking, Gross National Product, and devices measuring economic progress. The Federal Reserve System, business fluctuations and business cycles, taxation and government finance are also included as specific areas of course coverage.

#### B.E. 405. Office Practice—Clerical

3 s.h.

Much of the work in this course involves the use of machines—calculating, duplicating, bookkeeping, special typewriters, and transcribing machines. Filing is also part of the course.

#### B.E. 407. Office Practice—Secretarial

3 s.h.

This course familiarizes the prospective teacher of secretaries with the operation of voice-writing and duplicating equipment. The duties of the secretarial worker are studied. Understanding of office procedures and stenographic skills are strengthened through supervised office assignments and class work projects.

#### B.E. 408. Business Finance

3 s.h.

This course deals with the processes involved in the financing of business organizations from the time of their inception and promotion, during operation and expansion, and during the period of reorganization. Problems involving financing by means of stocks, borrowing capital, mortgages, bonds, and notes are solved.

#### B.E. 409. Consumer Education

3 s.h.

Consideration is given to the role of the consumer in the economy, some of the forces affecting consumer demand, governmental and private agencies aiding the consumer, and development of intelligent techniques for buying and using consumer goods and services.

#### B.E. 410. Advanced Accounting

3 s.h.

This advanced course for students who have had two years of accounting emphasizes problems related to basic accounting principles, cost accounting, and intermediate accounting. Topics considered include determination of net income, valuation, consignments, preparation and analysis of financial statements, partnerships, and bankruptcy. Prerequisite: B.E. 402 or college equivalent.

#### B.E. 411. Tax Accounting

2 s.h.

The purpose of this course is to give a comprehensive picture of the Federal tax structure. Extensive training is provided in the application of basic principles to the specific problems of the individual. All forms involved in individual tax returns are studied. Prerequisite: 12 semester hours of accounting.

#### B.E. 412. Project Development in Consumer Education

2 s.h.

This course permits the students to explore in a specialized fashion two major areas of consumer education. Projects are developed on housing and furnishing of a home, which illustrate the handling of material and the procedures that might be used in developing other consumer education units. Prerequisite: A course in consumer education or economics.

#### B.E. 421. Finance and Investments for Families

2 s.h.

This is a general course in investments, trusts, and estates. It concerns itself with types of securities, diversification, sources of information, operation of the stock market, and analysis of financial statements. Also covered are trusts, wills, and estate planning.

#### B.E. 431. Data Processing-Introduction

2 s.h.

The primary purpose of this course is to familiarize the classroom teacher with literature and vocabulary of data processing; to study input and output media; types of equipment; to examine actual installations and to consider data processing in terms of the high school program and high school placement. The significance of job analysis and systems development is stressed.

# B.E. 433. Seminar: Study of use of Multiple-Channel Equipment in the Business Education Classroom 3 s.h.

This seminar concentrates on the use of multiple-channel equipment in the teaching and development of skills; explores the learning materials presently available; experiments with the development of original learning materials; studies problems arising for the teacher and the student in the use of such equipment; and explores the possibility of independent study in the skills areas. The writings and experiences of others using similar installations are evaluated. Various makes of equipment are studied. Some familiarity with the use of such equipment is achieved.

#### B.E. 449. Supervised Business Work Experience and Seminar 2 s.h.

The student who has not had extensive business experience has an opportunity to work full-time for six weeks during the summer in a business position under College supervision. An evening conference is held weekly to discuss problems related to the work experience program.

#### B.E. 480. Touch Shorthand in Recording Communication

2 s.h.

This course concentrates on introducing keyboard reaction patterns and theory concepts of the touch shorthand machine and in developing basic skills and a knowledge of operation of the machine. Time will also be devoted to discussing methods of presentation, and there will be discussions on how the teacher would organize and evaluate a course in touch shorthand.

#### GRADUATE COURSES IN DISTRIBUTIVE EDUCATION

#### D.E. 522. Advertising Media

2 s.h.

This course in advertising offers an opportunity to study in some detail the uses of various advertising media such as newspapers, magazines, radio, television, and direct mail, and to evaluate their effectiveness in terms of campaigns.

#### D.E. 551. Improvement of Instruction in Distributive Education 2 s.h.

This course gives the experienced distributive education teacher an opportunity to study the content, method, teaching aids, and evaluate procedures in instruction in the distributive education program.

#### D.E. 552. Advanced Salesmanship

2 s.h.

The behavioral science of selling is covered including the strategy of selling, importance of timing, tailoring selling to the individual prospect, sales psychology behind the demonstration, creative selling, and the nature of the prospects' motivation. Sales executives are invited to the classroom to answer questions and relate personal experiences of the professional salesman.

#### D.E. 553. Trends in Retail Distribution

2 s.h.

A comprehensive introduction to and evaluation of the field of retailing. The trends that indicate the future structure and functioning of the retail field, including consumer and marketing developments, are considered. Current periodic literature is examined and outside speakers are used to supplement classroom lectures.

#### D.E. 554. Workshop in Problems of Distributive Education

2 s.h.

Intensive analysis of problem-solving in distributive education programs. Discussion on individual problems and experiences in teaching and administering distributive education programs. Committee work-seminar method is used.

#### D.E. 555. Credits and Collections

2 s.h.

Study is made of the nature, basis and meaning of credit and credit control. Topics include functions of credit, credit instruments, types of credit, elements of determining credit risk, sources of credit information, and collection procedures.

#### D.E. 556. Retail Personnel Administration

2 s.h.

The objective of this course is to develop a comprehensive understanding of the personnel responsibilities of all retailing executives. A critical evaluation of current personnel policies and practices of successful retail stores is made. Visiting store executives are invited to discuss personnel administration in the classroom.

#### D.E. 557. Sales Management

2 s.h.

The place of the sales manager in modern retail marketing is covered as well as sales organization, sales operations, sales planning, and sales analysis. Also considered are the selection and training of salesmen, ethical problems in sales management, and social responsibilities of a sales manager in today's marketing operations.

#### D.E. 558. Executive Leadership in Retailing

2 s.h.

The objectives of this course are to acquaint the student with and to make him aware of the kinds of interrelationships among people in the retail organization, as well as to give the student insight into the techniques and problems of the modern executive. Awareness of the leadership required and the need for decision making are covered.

#### D.E. 559. Development of Retail Training Programs

2 s.h.

Analysis of training problems confronting managers in both line and staff positions are covered. The course includes both selling and non-selling programs, the training of new and present employees, general training of personnel in the store as it relates to store policies, store organization, and morale. Job analysis and evaluation as well as training of executives and supervisors for transfer, promotion, and versatility are considered.

#### SENIOR-GRADUATE COURSES IN DISTRIBUTIVE EDUCATION

#### D.E. 406. Advertising

2 s.h.

A comprehensive view is given of the policies and procedures involved in the planning, preparation, and application of advertising in a retail store. A critical approach is taken to the problems confronting the field of advertising and sales promotion. Consideration is given to the definition of sales promotion, objectives, establishment of policies, analysis of sales potentials, evaluation of media and agents, coordination and follow-up of sales promotion and advertising. (Part-time work experience recommended when taking Advertising.)

2 8.11.

#### D.E. 414. Merchandising

2 s.h.

This course analyzes the problems of how, what, where, and when to buy; terms of purchasing, tested receiving and marketing procedures; mathematics of merchandising—setting retail price, planning mark-up and mark-down; and inventory controls. (Part-time work experience recommended when taking Merchandising.)

#### D.E. 417. Marketing

2 s.h.

A study of the principles underlying the distribution and services from the manufacturer to the consumer. Marketing policies and practices are covered as well as the evolution and change of marketing procedures and recent governmental activities affecting marketing. A managerial approach to the subject is given.

#### D.E. 418. Retail Store Management

2 s.h.

The main objective of this course is to acquaint students with the problems involved in the successful operation of a retail organization. Attention is given to the preparation of the store for business, the movement of merchandise from the source to the store, the preparation of the goods for sale, the movement of the goods to the selling floor and then to the customer. Customer adjustment policies, store protection, and the latest kinds of equipment used by retail stores are also discussed and evaluated. (Part-time work experience recommended when taking Retail Store Management.)

#### D.E. 419. Merchandise Information

2 s.h.

Merchandise information, both textiles and non-textiles, are covered to give the student the background and selling information needed in the field of retailing. Students will be given standards for determining quality of products and a knowledge of how to care for them. Manufacturing processes of various products will be considered.

#### D.E. 422. Visual Merchandising

3 s.h.

A study is made of the basic principles and elements of color, line, form, texture, and space as they relate to displays, merchandising, and advertising. Topics include appropriate display space, lighting arrangements, improvisation of display equipment, the use of papier mâché forms, seasonal displays, equipment, and care of display fixtures.

#### D.E. 423. Buying for Distribution

2 s.h.

A study of the techniques employed in performing the functions of the merchandise division of a store. The functions of the buyer and the many facets of the buyer, and problems in the store are discussed. Other topics included are customer demand analysis, comparison shopping, bargain hunting, and planning the buyer's budget. Buying fashions, staples for independent stores, chain stores, and resident buying offices, as well as foreign buying are covered.

#### D.E. 450. Supervised Work Experience and Seminar I

2 s.h.

Students will gain supervised paid-for work experience in a cooperating department or mass merchandise (discount) store. As part of the supervised work program they attend a weekly evening seminar in which discussions will center on their activities in the stores and on their development of executive abilities during the training. Trainees are required to submit regular progress reports. Work program is in operation full-time during July and August (minimum of 8 weeks) of the summer session following completion of the sophomore year for undergraduates, and offered every summer for graduate and special students.

#### D.E. 451. Supervised Work Experience and Seminar II

2 s.h.

Supervised paid-for store experience is gained in a specialty or limited-price variety store. Students attend a weekly evening seminar in which discussions will center on their activities in the stores and on their development of executive abilities during the training. Trainees are required to submit regular progress reports. Work program is in operation full-time during July and August (minimum of 8 weeks) of the summer session following completion of the junior year for undergraduates, and offered every summer for graduate and special students.

#### D.E. 452. Principles of Vocational Education

2 s.h.

The purpose of this course is to acquaint educators and prospective educators with the basic principles and practices of vocational education. The course covers the cooperative Federal-State programs of vocational education developed under the Smith-Hughes Act, George-Barden Act, George-Deen Act, and the 1963 Vocational Education Act.

#### D.E. 453. Curriculum Development in Distributive Education

2 s.h.

The purpose of this course is to acquaint educators and prospective educators with the construction of the distributive education curriculum. Included are an understanding of the needs and interests of the community in curriculum planning, careful planning and group cooperation in curriculum, the over-all development of the pupil, developing vocational competencies in curriculum, adult education curriculum planning, keeping records and results through follow-up procedures, and the evaluation of curriculum.

#### D.E. 454. Principles and Methods of Distributive Education

2 s.h.

The purpose of this course is to acquaint educators and prospective educators with the basic principles of teaching distributive education as well as specific methods of teaching the program. Coverage includes the federal legislation as it relates to the program, coordinator's duties, methods in teaching store subjects, use of lecture and demonstration in teaching, forms, reports and manuals, planning the lesson, human relations for store personnel, visual aids, free sources of materials, textbook evaluation, trade journal use, and the DE Club as a teaching device. Teaching demonstrations are also a part of the program.

#### D.E. 455. Coordination of Distributive Education

2 s.h.

The purpose of this course is to acquaint educators and prospective educators with the objectives of distributive education as they relate to the coordinated distributive education program. Included are the coordinator's job, basic factors of cooperative programs, the use of advisory committees, policies of local school systems, making preliminary surveys of the community, evaluating training possibilities, selecting training agencies, pupil selection, supervision and directed study methods. (Part-time work experience recommended when taking Coordination of Distributive Education.)

#### D.E. 456. Organization and Administration of Distributive Education 2 s.h.

The purpose of this course is to acquaint educators and prospective educators with the objectives of distributive education and with the details and problems of organizing and administering as well as supervising a complete cooperative program in distributive education. Areas covered are: organization of vocational education on the federal, state and local levels, understanding the use of a state syllabus, setting up, supervising and operating a cooperative program, surveys of community needs and student needs, physical equipment requirements, advisory committees, and the use of public relations and extension programs.

# DEPARTMENT OF EDUCATION

Faculty Advisors: Dr. EARL K. PECKHAM, Administration and Supervision

DR. EARL C. DAVIS, Personnel and Guidance

MISS SIMONE C. PICARD, Major in Teaching

Graduate courses in this department meet one or more of five needs: (1) instruction in the Administration and Supervision major leading to the M.A. degree and New Jersey certification for one or more of the positions of General Secondary Supervisor, Secondary School Principal, and Assistant Principal or Vice Principal; (2) instruction in the Personnel and Guidance major leading to the M.A. degree and New Jersey certification in guidance; (3) advanced professional instruction for administrators, supervisors, counselors, and classroom teachers; and (4) Master of Arts with a major in Teaching, designed to prepare liberal arts college graduates for teacher certification by combining certification requirements with additional work at the graduate level; (5) M.A. in Reading (See Supplement.)

The admission requirements and the requirements for the M.A. degree in each of the separate areas within the field of Education: Administration and Supervision, Personnel and Guidance, and Master of Arts in Teaching, are given separately. Students who are not candidates for a degree may elect any courses except those for which they may not have the necessary prerequisites or which are restricted to candidates in the field of specialization.

# ADMISSION TO AND REQUIREMENTS FOR THE M.A. DEGREE IN ADMINISTRATION AND SUPERVISION

### **Admission Requirements**

In addition to the general College admission requirements, a student must hold a New Jersey teacher's certificate and have two years teaching experience in grades 7-12 completed prior to matriculation. Those whose undergraduate work and experience were obtained outside of New Jersey must meet New Jersey certification and experience standards.

# **Degree Requirements**

Satisfactory completion of not fewer than thirty-two semester-hours of work as follows: (In exceptional cases appropriate substitutions or changes may be made in these requirements upon approval by the Program Adviser.)

۱.	Req	uired	Courses	20	s.h.
	Ed.	503.	Methods and Instruments of Research	2	s.h.
	Ed.	510.	Introduction to Educational Administration	2	s.h.
	Ed.	512.	School-Community Relations	2	s.h.
	Ed.	514.	School Law	2	s.h.
	0	r			
	Ed.	516.	School Finance	2	s.h.
	Ed.	520.	Organization and Administration of the Modern High School	2	s.h.
	Ed.	530.	Curriculum Construction in the Secondary School	2	s.h.
	Ed.	535.	Organization and Administration of Extra-Curricular		
			Activities	2	s.h.
	Ed.	540.	Supervision in the Secondary School I		

#### 40 / EDUCATION

	Principles and Techniques of Guidance	2 s.h.
Ed. 329.	and Supervision	2 s.h.
or Ed. 539.	Research Seminar in Curricular Organization	2 s.h.

#### B. Education Department Electives

6 s.h.

The student with his advisor's approval, will select six semester hours in additional Education Department courses.

#### C. Electives in Other Departments

6 s.h.

The student, with his advisor's approval, will select six semester hours of course work in other departments. It is intended that the electives chosen shall be of a liberal-cultural orientation selected to broaden the student's interests and background. No more than two semester hours may be taken in the same subject field. Usually not more than two semester hours should be selected from any one department.

D. Candidates for the Master's Degree in Administration and Supervision will be required to pass a written comprehensive examination given in March in the year immediately prior to the planned graduation date.

### ADMISSION TO AND REQUIREMENTS FOR THE M.A. DEGREE IN PERSONNEL AND GUIDANCE

### **Admission Requirements**

In addition to general College admission requirements, a student must hold a New Jersey teacher's certificate, and have two years of teaching experience. One year of this experience must be completed prior to matriculation. (Not more than eight semester hours will be counted toward this degree prior to the obtaining of this certificate and the beginning experience.)

### **Degree Requirements**

1 Posic Paguirements

Satisfactory completion of not fewer than 32 semester hours as follows:

•	1. Basic Requirements						
	Ed. 5	03.	Methods and	Instruments	of Research	1	2 s.h.
	104 6	67	Educational a	nd Deveholos	rical Maneur	amente in Guidance	2 ch

Ed.	567.	Educational and Psychological Measurements in Guidance 2	2	s.n.
Ed.	580.	Principles and Techniques of Guidance	2	s.h.

# 2.

Select 4 s.h. from the following:					
Ed. 560.	Advanced Educational Psychology	2 s.h.			
Ed. 561.	Child and Adolescent Development	2 s.h.			
Ed. 562.	Principles of Mental Hygiene	2 s.h.			
Ed. 564.	Psychology and Education of Exceptional Children				
	- Physical and Mental	2 s.h.			

Ed.	565.	Psychology and Education of Exceptional Children		
		- Social and Emotional	2	s.h.
Ed				e h

Ed. 566. Psychology and Education of the Gifted ..... 

3.	Select 10 following.	s.h. from the following: (Ed. 580 is a prerequisite for all c	of	the
			2 2 2 2 2 2	s.h. s.h. s.h. s.h. s.h. s.h.
4.	Select 4 s.h	n, from the following:		
	Ed. 602. Ed. 604.	Workshop in Education—Guidance 2- Research Seminar in Guidance 5- Field Work in Guidance 2- Practicum in Guidance Services 2-	4	s.h.
5.	Free electi	ives in any department of the college	8	s.h.

 Candidates for the Master's Degree are required to pass a comprehensive examination.

# ADMISSION TO AND REQUIREMENTS FOR THE M.A. DEGREE (Major in Teaching)

# SECONDARY (7-12) AND SPECIAL FIELDS (K-12)

These Certificate and Master's Degree programs are designed especially for college graduates who wish to prepare to become secondary school teachers or teachers of special subjects such as art and music in the elementary and secondary grades. The content, organization, materials, and methods of these courses are designed with this consideration of the student's maturity, academic background, and experience. This M.A. program is open to students with undergraduate background equivalent to a teaching field in one of the following areas: Art, Business Education (e.g. Bookkeeping and Accounting, General Business Education, Secretarial Studies), English, Foreign Languages (e.g. French, Spanish, Latin), Home Economics, Industrial Arts, Mathematics, Music, Physical Education, Science, Social Studies, Speech and Dramatic Arts.

### Admission Requirements: (Certificate\* or Degree Programs)

Admission is restricted to those selected graduates of accredited colleges who indicate high potential for teaching, and to in-service teachers with emergency or provisional certificates.

College graduates not employed as teachers will be screened for admission with due consideration to:

<sup>\*</sup> Students who successfully complete the Certificate Program will be recommended for appropriate New Jersey teacher certificates.

- a. Suitability or character and personality for teaching
- b. Health examination
- c. Speech and writing competence
- d. Competence in teaching field, based upon undergraduate grades of B— or better (2.67 on a 4 pt. scale). Students who present lower grade point averages must also present scores earned on the Graduate Record Examination Aptitude Test. . . .

In-service teachers holding emergency or provisional certificates, employed by local school districts, will be admitted to the program upon application, and agreement by the employing superintendent of schools to enter into a cooperative program of supervision of the student in connection with course Education 595E, 595F Supervised Teaching Seminar. During the first semester these students will complete the application procedure regarding character, health, speech, and writing, and preparation in subject-matter field. When the student completes six to ten semester hours work at Montclair, a decision will be made regarding matriculation for the M.A. degree. If, as a result of failure to satisfy the screening criteria or unsatisfactory performance in the program, it is considered necessary to withdraw a student, conferences will be arranged with the student and the employing superintendent as early as possible.

#### Certification and Degree Requirements

#### A. Basic Background Requirements

A student must have a minimum of thirty graduate or undergraduate semester-hour credits in general background courses distributed in at least three of the following fields: English, social studies, science, fine arts, mathematics, and foreign languages. Six semester-hour credits in English and six semester-hour credits in social studies will be required.

#### B. Subject-Matter Specialization

A student must have a subject-matter background suitable in extent and coverage to constitute a teaching major in at least one field. Evaluation should be done through the certification advisor and departmental advisor.

#### C. Professional Requirements

Prior to completion of the Certificate and/or Master's Degree programs, the student must have completed the following professional curriculum. Courses may be waived that have been completed at either the graduate or undergraduate level, prior to enrollment in the program. However, no student will be recommended for a certificate or a Master's Degree who has not completed Student Teaching\* or the Supervised Teaching Seminars at the College.

Stateme reasoning of the Supervised reasoning Seminary as the Comes	•
Ed. 595A. Foundations of Education, Part I  Ed. 595B. Foundations of Education, Part II  Ed. 595C. Structure and Organization of American Schools  Ed. 595D. Curriculum and Methods of Instruction  Ed. 560. Advanced Education Psychology  Ed. 561. Child and Adolescent Development	3 s.h. 3 s.h. 3 s.h. 2 s.h.
Ed. 361. Child and Adolescent Development	Z S.II.
Elective — one course from the following:	2 s.h.
Ed. 564. Psychology and Education of Exceptional Children:	
Physical and Mental	(2)
Ed. 565. Psychology and Education of Exceptional Children:	
Social and Emotional	(2)
Ed. 566. Psychology and Education of the Gifted	(2)

\*Although part of the professional program may be waived on the basis of previous college work, students are admitted to Education 403, Student Teaching, only after completing sufficient preparation at the college to enable the college to assess their potential as teachers and to recommend them to a school district as student teachers. \*\*Teachers in service on substandard certificates will substitute Education 595E, 595F, Seminar and Supervised Teaching. These students will be admitted to the program only with the prior permission of the local superintendent of schools, and agreement with the local school system regarding a program of joint supervision with the college. Unlike Student Teaching, the Seminar and Supervised Teaching may be the initial course in the student's program.

# Total Professional Program for Certification26 s.h.D. Additional Requirements for the M.A. degree14 s.h.Ed. 595G. "Action" Research for Teachers3 s.h.Ed. 595H. The Teaching of Communication Skills3 s.h.Electives8 s.h.

Students may choose, with advisement, electives in general education or subject matter specialization.

Selected matriculated students may be invited to develop a Master's thesis of quality under the guidance of a thesis advisor for which four semester hours of elective credit will be allowed.

#### Total Master of Arts (Major in Teaching)

Minimum 40 s.h.

If part of the professional requirements are waived on the basis of previous college work, students may take less than 40 s.h. of work at the College; however, to qualify for the Master of Arts degree, at least 32 semester hours of graduate work must be completed, under advisement, in the Montclair State College Program.

#### **GRADUATE COURSES**

Note: Students are not permitted to enroll in courses they have taken previously under other titles and/or other course numbers.

# Education 500. Recent Trends in Secondary School Methods 2 s.h.

This course emphasizes the fundamental principles underlying the technique of teaching on the secondary school level. Some of the topics considered are: organization of knowledge, the logical and psychological aspects of method, developing appreciations, social-moral education, teaching motor control, fixing motor responses, books and verbalism, meeting individual differences, guidance in study, tests and examinations, marks and marking.

### Education 501. Tests and Measurements in Secondary Education 2 s.h.

The purpose of this course is to develop an appreciation of the meaning and importance of measurement in education, and to give a working knowledge of instruments of measurement.

# Education 502. Teaching the Block of Time Curriculum in the Junior and Senior High School 2 s.h.

This course concerns the structure, organization, and methods of teaching block of time curricula in secondary schools, after a discussion of underlying philosophy and historical development.

#### Education 503. Methods and Instruments of Research

2 s.h.

This course is required of all regularly matriculated candidates for the Master's Degree without regard to their field of major interest. Its purpose is to introduce students of education to research and its practical application to professional problems. The course treats: the nature and types of educational research; methods and techniques of educational research; and the tools used in interpreting statistical data. During the course, the student completes his outline and may complete his research either in this course, in Education 603, or in his departmental seminar or research course. It is recommended that this course be taken rather early in the graduate program. It must precede work in departmental seminar or research courses. Prerequisite: Math. 320, Educ. 501, or equivalent, and M.A. candidacy. Math. 320 does not carry graduate credit.

#### Education 505. The Two-Year College

This course is designed to acquaint the student with the history, purposes, patterns, and trends of the two-year college, including the junior college, the community college, and university extension centers.

#### Education 506. Teaching in the Two-Year College

2 s.h.

This course is designed to examine the instructional problems in public twoyear colleges as they are affected by: the student population, the curriculum functions, the organization of the program, and the guidance responsibilities of the teacher. Field study visits to nearby two-year colleges are required.

#### Education 510. Introduction to Educational Administration

2 s.h.

This is the basic course in the organization and administration of the American school system at the national, state, intermediate, and local levels. The purposes and nature of school administration are studied. Other topics surveyed include: the superintendency, personnel problems, records and reports, plant administration, business administration, auxiliary services, administration of curriculum, instruction, guidance, and pupil personnel.

#### Education 511. School Business Administration

2 s.h.

Topics considered in this course include: the role of business administration in public education, office management, budgetary procedures, financial accounting, payroll administration, purchase and supply problems, insurance, debt service management, transportation, and food service. Prerequisite: Educ. 510 or equivalent.

#### Education 512. School Community Relations

2 s.h.

This course concerns the relation of the school to other educational efforts of the community. It considers the scope and types of agencies and informal influences of an educational nature, and also the agencies and methods by which the best total cooperative effort can be attained. It deals also with methods and plans of publicity. Constant reference throughout is made to New Jersey localities.

#### Education 514. School Law

2 s.h.

After an introductory general study of such topics as: legal theory, the separation of school government from other local government, the appellate function of the State Commissioner of Education and the State Board of Education, the course is concerned principally with a study of New Jersey school laws (Title 18 of the Revised Statutes) and decisions, Prerequisite: Educ. 510 or equivalent.

#### Education 516. School Finance

2 s.h.

After an introductory unit concerned with the current economic environment, this course is devoted to a study of state and local taxation, state school-aid theory and practice, school-district indebtedness, cost-quality relationships, Federal aid, fiscal controls, and the budgetary process. Prerequisite: Educ. 510 or equivalent.

# Education 520. Organization and Administration of the Modern High School

The following topics are considered: the student personnel, building and revising the high school curriculum, providing for individual differences, making the school schedule, records, the guidance program, pupil participation in government, the extracurricular program, the health program, the safety program, discipline, library and study hall, cafeteria, the principal's office, and evaluating results. Prerequisite: Educ. 510 or equivalent.

#### Education 525. Secondary School Building Planning

2 s.h.

This course deals with the education planning of secondary-school buildings. The preparation of educational specifications and space requirements is considered. Topics considered include the planning of offices, classrooms, auditoriums, gymnasiums, laboratories, shops, libraries, cafeterias, and other spaces. Prerequisites: Educ. 520, 530 or equivalents.

# Education 529. Seminar in Secondary School Administration and Supervision 2 s.h.

In this course the class makes an intensive study of administrative and supervisory problems suggested by the educational events and trends of the year, by the interests and responsibilities of the members of the class, and by educational movements in New Jersey and the country. Each student does an individual piece of research which he reports to the class. This represents advanced work which depends upon previous study or experience in educational administration or supervision. Prerequisites: Educ. 503, 520 and 540 or equivalents.

#### Education 530. Curriculum Construction in the Secondary School 2 s.h.

The purpose of this course is to consider the extent to which the secondary school curriculum meets the needs of a changing civilization, and to consider effective means of curriculum construction.

# Education 535. Organization and Administration of Extracurricular Activities

2 s.h.

The first part of the course considers such general problems of extracurricular activities as: their growing importance; their relation to the curriculum; the principles underlying their organization, administration, and supervision; and methods of financing. In the second part, an intensive study is made of the home room, the assembly, the student council, clubs, athletics, school publications, and other activities in which the class is especially interested.

### Education 538. Curriculum Construction in the Elementary School 2 s.h.

This course offers an opportunity to review state and city elementary curricula: to discuss the principles of curriculum construction; to collect new teaching materials for the various subjects; and to evaluate, organize, and grade these materials. Teaching procedures in the use of materials are discussed and evaluated in terms of pupil needs, the objectives set up, and the results obtained. This course offers an opportunity to make a special study of the materials and procedures to be used in the supervision of the language arts.

#### Education 539. Seminar in Curriculum Organization

2 s.h.

This course is for students actively engaged in problems of curriculum reconstruction and for those who are anticipating committee work in this field. It concerns both the elementary and secondary levels. Each student does an individual piece of research which he reports to the class. This represents advanced work which depends on previous study in the curriculum area. Prerequisite: Educ. 503, 530 or 538.

#### Education 540. Supervision in the Secondary School: Part I.

2 s.h.

This course supplies the background needed for those who carry on the supervisory roles in educational institutions, such as principals, vice principals, special and general supervisors. It stresses the principles guiding the supervisory functions; describing supervision as guiding and encouraging professional growth through leadership activities: conducting meetings, discussion groups, professional reading, cooperative curriculum modifications, and community related activities. It is strongly urged that those taking Education 540X plan to take Education 541.

#### Education 541. Supervision in the Secondary School: Part II. 2 s.

This course stresses the methods used by supervisors to guide teachers into the best practices that are growing out of the most recent findings in psychology and changing concepts in the theory of learning. It stresses class activities of teachers and the effective ways of evaluating teaching and guiding it toward improved practice. It interprets the supervisor's role as that of a co-worker with teachers in understanding individual differences, selecting instructional materials, evaluating pupil growth, and creating a classroom atmosphere that excites and challenges learning. The course covers such topics as planning variety in methods, evaluation and giving teachers deeper understanding of their subject and their influence on personal growth of pupils. Prerequisite: Educ. 540.

# Education 550. Guiding the Reading Interests of Secondary School Students: Part I. Materials and Sources 2 s.h.

# Education 551. Guiding the Reading Interests of Secondary School Students: Part II. Needs and Services 2 s.h.

The purpose of these courses is to prepare teachers to discover and improve the reading interests and attitudes of their students. Useful to all content area teachers and specialists who assign recreational and research reading, Part I particularly deals with fundamental bibliographical tools, the classroom teacher's relationship to the library, current source materials in book evaluation, and techniques for determining book selection. In Part II the teachers write their own book annotations and reviews, establish readability and suitability criteria based on a growing knowledge of child development, help build collections and services for young people which meet their personal needs through reading. (Educ. 550 not open to those who have taken Eng. 547; Educ. 551 may be taken as Part II after Eng. 547.)

# Education 552. Principles of Reading Improvement in the Secondary School 2 s.h.

This is a course planned to present a deeper picture of the guiding principles and controversial issues which influence the teaching and learning of reading. Organized especially for the subject area teacher and the beginning reading specialist, recent non-clinical research and important professional and lay journals are studied to explore the pendulum of theory and practice in: the organization and administration of developmental reading programs, educational policies which affect reading, child development concepts and reading growth, systematic differentiation of individual needs, and reappraisal of the place of reading in our changing society. (Not open to those who have taken Educ. 556.)

# Education 553. Techniques of Reading Improvement in the Secondary School 2 s.h.

This is a practical course dealing with popular techniques useful in the improvement of non-clinical reading difficulties found in the content subjects. Planned especially for the subject area teacher and the beginning reading specialist, a study is made of secondary school reading needs, and specific suggestions are

outlined for guiding the slow, average, and gifted student to success in reading up to his capacity in a classroom situation. Through an actual study of the more widely used reading workbooks, films, slides, tachitoscopic instruments, and texts available in the Reading Laboratory facilities, a practical approach is made to building a repertoire of reading skills in many areas. (Not open to those who have taken Educ. 430 and 557.)

#### Education 554. Case Studies of Reading Difficulties: Part I. Testing 2 s.h.

#### Education 555. Case Studies of Reading Difficulties: Part II. Reporting 2 s.h.

These are the basic courses in learning to use diagnostic materials and learning to write up diagnostic findings. In Part I after making a thorough study of the most frequently used current test instruments and inventories, each teacher applies this knowledge to the actual testing of a child with reading problems. Particular attention is given to the unique values of group and individual tests, survey and diagnostic tests, and standardized and informal tests. In Part II the class learns to interpret test data. Practice in case reporting to parents, schools, and agencies is undertaken. (Educ. 554 not open to those who have taken Eng. 430; Educ. 555 may be taken as Part II after Eng. 430.)

#### Education 556. Corrective and Remedial Reading: Part I. Causation 2 s.h.

#### Education 557. Corrective and Remedial Reading: Part II. Treatment 2 s.h.

These are causation and treatment courses planned for the teacher and specialist who are involved in some aspect of remedial instruction in reading improvement. Part I offers an opportunity to extend training by investigation and interpretation of the more serious reading problems. A study is made of the constellation of causes of reading difficulties, and techniques of remedial and corrective treatment are projected. In Part II particular attention is paid to the selection and adaptation of suitable improvement devices and curriculum materials. Illustrative cases are drawn from actual clinical experiences by requiring participation in the program of the Reading Laboratory. (Educ. 556 not open to those who have taken Educ. 530A, 558; Educ. 557 not open to those who have taken Educ. 530B and 559.) Prerequisite: Permission is needed to take these courses.

#### Education 560. Advanced Educational Psychology

2 s.h.

This course focuses on the learner and the learning process in school situations. The topics include: motivation; acquisition of skills, ideas, and attitudes; technological and other innovations in teaching and learning; and evaluation of teaching-learning. Prerequisite: An introductory course in psychology.

#### Education 561. Child and Adolescent Development

2 s.h.

This course reviews the general characteristics of child and adolescent development: motor and physiological, social, emotional, language, intellectual, and interests and ideals. The influences of home, school, community, and institutional life on child and adolescent development are considered as well as problems of guidance presented by children in the normal course of development and also those presented by deviations from the normal course.

#### Education 562. Principles of Mental Hygiene

2 s.h.

This course is designed to be a general survey of the principles and practices of mental health with special reference to the mental health of teacher and pupil. It involves a thorough grounding in fundamental principles of mental hygiene with much practical consideration of the mental health values of instructional programs and procedures. Discussion centers on practical efforts to develop wholesome personalities in our schools.

# Education 564. Psychology and Education of Exceptional Children: Physical and Mental 2 s.h.

This course surveys current practices and problems in the education of children with physical and mental handicaps, and of gifted children. It is designed for teachers, counselors, supervisors, and administrators who may work with one or more such children or who may wish to prepare for school and community leadership in developing facilities for exceptional children. Prerequisite: A course in child and adolescent psychology.

# Education 565. Psychology and Education of Exceptional Children: Social and Emotional 2 s.h.

This course surveys current practices and problems in the education of socially and emotionally handicapped children. It is designed for teachers, counselors, supervisors, and administrators who may work with one or more such children or who may wish to prepare for school and community leadership in developing facilities for exceptional children. Prerequisite: A course in child and adolescent psychology.

#### Education 566. Psychology and Education of the Gifted

2 s.h.

2 s.h.

2 s.h.

This course is designed to present a complete picture of the bright and gifted young people in contemporary American life. It surveys the various practices involved in their education, as well as the psychological characteristics of this group and socio-emotional development. It is designed for teachers, counselors and administrators, and is conducted on an advanced level, allowing sufficient time for seminar discussions in addition to lectures.

#### Education 567. Educational and Psychological Measurement in Guidance 2 s.h.

This course deals with fundamentals of educational and phychological measurements in guidance: test theory, statistical concepts, test construction, evaluation, and interpretation. The place of tests in the instructional program is stressed. Prerequisite: This course is open only to those with teaching experience.

#### Education 568. Psychological Tests in Guidance Programs

This course is designed to familiarize the student with various psychological tests and scales that may be used in guidance programs in the secondary school. The student is given practice in administering many types of group tests. This includes scoring the tests and evaluating the results, with a discussion of ways in which these results may be used. Much time is spent in actual laboratory demonstrations of tests, giving students an opportunity to serve as subjects and as examiners. Class discussion is based upon first-hand information gained through use of the tests, on readings, and on class reports, Prerequisite: Educ. 567.

#### Education 569A. Group Tests and Statistical Analysis

This course is planned to meet the needs of the Elementary School Guidance Consultant to accumulate test information on students in the elementary grades and to interpret the results to teachers, administrators, and parents. Implicit in this course will be the use of appropriate statistical analysis to draw conclusions for research and evaluation. Consideration will be given to test batteries in the areas of achievement, aptitude and intelligence; their administration, use, and interpretation for the elementary grades. Some time will be devoted to the organization and planning of the testing program. Prerequisite: Educ. 567.

#### Education 580. Principles and Techniques of Guidance

2 s.h.

Topics included in this course cover: philosophy of guidance, history of the guidance movement, the need for guidance presented by children and adolescents. The methods of gathering useful data are studied, and school records, exploratory activities, tests, inventories, the case study approach, occupational information, and occupational data are treated as well as general methods of guidance with special stress on interviewing and counseling of students.

#### Education 581. Community Resources for Guidance

2 s.h.

This course deals with the various agencies, industries, and institutions available in the surrounding communities for use in guiding students. In addition to becoming familiar with the location and nature of these facilities, students learn the techniques for arranging student interviews and visits. Class discussion and personal research are supplemented by field trips. Prerequisite: Educ. 580.

#### Education 582. Vocational Guidance

2 s.h.

This course is intended for counselors in the junior and senior high schools to obtain information about the principles and philosophy of vocational education and the techniques of counseling youths who wish to receive pre-employment training, and for counselors of out-of-school groups who are attempting to make readjustments to occupational life. Attention is also given to guidance techniques for job preparation and readjustment, the matching of educational and personal abilities to job specifications, the effects of social legislation on the employment of youths, and a study of techniques used in determining occupational needs and occupational changes. Prerequisite: Educ. 580.

#### Education 583. Educational Guidance

2 s.h.

This course is concerned with the facilities available for education after high-school graduation, the problem of further training for pupils leaving school before completing high school, and the academic problems of students while in school. A brief survey of colleges and college-admission procedures is made. Prerequisite: Educ. 580.

#### Education 584. Social-Moral Guidance

2 s.h.

This course is concerned with the non-vocational and non-academic personal and social problems of pupils as well as with the development of techniques by which counselors can integrate the pupil's personal life with the mores and customs of society. It also includes a study of the possible services of various community agencies and a study of the counselor's relation to problems of discipline and citizenship education. Prerequisite: Educ. 580.

#### Education 585. Group Guidance and Counseling Activities

2 s.h.

This course is concerned with the various techniques for helping individual pupils and for using group activities including role-playing as a guidance technique. The group activities considered include those of home rooms, activity periods, occupation courses, student field trips, placement follow-ups, college nights, and career days. Prerequisite: Educ. 580.

#### Education 586. Elementary School Guidance Services

2 s.h.

This course is designed for guidance counselors in the public schools with particular emphasis on the guidance services that may be offered in grades kindergarten through six. The guidance program, as established in the public schools, envisions supervision and administration of the guidance program from the kindergarten through graduation at grade twelve. It is important, therefore, that the guidance director understands the services that can be made available to the elementary school. Prerequisite: Educ. 580.

#### Education 587. Administration and Supervision of Guidance Programs 2 s.h.

This course is designed to acquaint the student with more complex aspects of the supervision and administration of a guidance program. It includes such topics as: developing and administering programs of student registration (course selection); theory and techniques of scheduling a modern high school; supervisory responsibilities of the director of guidance within and outside of the department; coordinating guidance activities in a multi-school district, etc. In general, this course is aimed at providing essential background for counselors desiring to establish or administer a guidance program in a high school or a multi-school system.

The primary method of study is the examination and evaluation of current guidance practices leading to the formation of proposals for improvement, and possible inclusion, in guidance programs where the student is working as a counselor and/or a director. Prerequisites: Educ. 580 and 6 s.h. in Area 3 of the Personnel and Guidance M.A. program.

### Education 588. Techniques of Interviewing and Counseling 2 s.h

This is an advanced techniques course in the counseling of individual students. The directive, non-directive, client-centered, and role playing approaches, as well as the case study methods are studied. Opportunity for demonstration and practice with these techniques are implemented with tape recordings, one way screens, and closed-circuit television. Prerequisites: 12 s.h. of work in the Personnel and Guidance M.A. program and permission of the faculty adviser.

#### Education 589. Student Personnel Services in Higher Education 2 s.h.

This course is a study of the student personnel functions in two-year and four-year colleges. The areas to be included are: personal counseling, financial aid, dormitory management, health program, student activities and social programs; course selection, job placement, college admission and academic retention, administration and supervision of the program.

# Education 590A. Interviewing and Counseling in Elementary Schools 2 s.h.

Recognizing that the problems of the Elementary school child differ from those of the Secondary school student, this course is established to study the techniques that are appropriate to the individual counseling of elementary school children. Special attention will be given to the identification of problem areas and referral services; the use of records and teacher reports. Much of the class time will be devoted to praticums and case studies with ample opportunity for the student to engage in supervised practice. Prerequisite: Educ. 586 and apropriate Psych. background.

# Education 591A. Consulting with Parents and Faculty in Elementary Schools 2 s.h.

Just as interviewing and counseling with the individual student is important to a better understanding of the child's needs, so an opportunity to work closely with parents and faculty offers a far better chance to understand the background and motivations of the child. This course will study the best methods of meeting with parents and faculty, understanding them, working cooperatively with them, and planning with them for the child's future. A laboratory approach will be fundamental to the course. Prerequisites: Educ. 586 and 588.

# Education 591B. Consulting with Parents and Faculty in Secondary Schools 2 s.h.

This course has the same background, motivation, and philosophy as 591A. The emphasis, however, is on secondary school children, parents, and faculty. Prerequisite: Educ. 588.

#### Education 595A, 595B. Foundations of Education: Part I and II 3 s.h. each

This course is organized in terms of current educational issues and topics of interest. It is designed to provide the student with an understanding of the historical, philosophical, and social backgrounds to which an educational item is related and from which it may have evolved. It includes those elements of educational philosophy, educational sociology, and history of education which may be pertinent to the current problem and which will provide the teacher with the necessary perspective to deal with it in an intelligent manner. The topics included in the course are selected in such a way that a large number of basic concepts will be involved.

This course is organized in two parts, three semester hours each, of which either part may be taken prior to the other or concurrently with it.

(Open to M.A. [major in Teaching] and certification students only.)

### Education 595C. Structure and Organization of American Schools 3 s.h.

This course provides a basic orientation in the following areas of professional concern: (1) The organization and role of the public schools in American Society, (2) The responsibility of Federal, State, and Local Governments for the education of youth, (3) The nature of teaching as a profession, (4) The evolving role of the school in community improvements, and (5) current school practices.

(Open to M.A. [major in Teaching] and certification students only.)

#### Education 595D. Curriculum and Methods of Instruction

3 s.h.

An overview of curriculum is provided. Insight into the role of the teacher in the teaching-learning process is developed. The routine activities and auxiliary responsibilities of the teacher are examined. Students learn about the sources of curriculum materials, and the selection and use of teaching aids. Lesson plans and units of work are prepared for use in the classroom. Through cooperative and/or team teaching, instructors from various college departments assist prospective techers with specific methods of teaching.

(Open to M.A. [major in Teaching] and certification students only.)

#### Education 595E, 595F. Supervised Teaching Seminar

4 s.h. each

This seminar is provided for in-service teachers employed on an emergency or provisional certificate and is open to students participating in the "approval" certification program or the Master of Arts in Teaching Program. Arrangements are made with the employing Superintendents of Schools for joint supervision of the in-service teacher by local school and College officials. The student will assume full teaching responsibilities and will meet periodically at the College for a complete academic year.

In this seminar students have an opportunity to examine their teaching materials and techniques and to share their experiences with other beginning teachers. Cooperating local school personnel and supervising instructors assist the new teachers with their on-the-job problems.

(Open to M.A. [major in Teaching] and certification students only.)

#### Education 595G. "Action Research" for Teachers

3 s.h.

This course is designed to provide teachers with an understanding of the basic principles and techniques of research which are applicable to their classroom situations. Examples of various kinds of classroom research, both of an individual and group nature, are studied and analyzed. Practice is provided in the planning and outlining of specific research projects, the development of experimental designs, and the evaluation of the structure and outcomes of classroom research. Each student develops, in detail, a plan for a research project which he might be interested in undertaking in his own classroom.

(Open to M.A. [major in Teaching] and certification students only.)

#### Education 595H. The Teaching of Communication Skills

3 s.h.

The role of communication skills is of major importance in the learning process. Every teacher should be aware of the abilities, limitations, and needs of students in this area, the adaptations that must be made in curricula, assignments, and classroom procedures to the levels of the students in a classroom, and the remedial measures that might be taken to improve their status. These communication skills include the specific areas of speaking, listening, reading, and writing. Instructors from the departments of Speech, Reading, and English are involved in this course. The endeavor is made to have the students gain an understanding of the basic principles in each of these fields and their relationship to the teaching of any subject.

(Open to M.A. [major in Teaching] and certification students only.)

#### Education 601. Workshop in Education

2 or 4 s.h.

Section A — Administration

Section B — Supervision

Section C — Curriculum

Section D — Guidance

Section E - Psychology

The workshop course enables the graduate student to devote his time to an educational topic or school problem of current interest to him and to secure the help of the staff, fellow students, and college facilities in pursuing this study. Members of the workshop may meet together to discuss matters of common concern in respect to the current school situation. In addition, the student works independently on his own subject and at times meets with a small group interested in the same area.

In the past, students have worked on topics in such areas as these: problems in administration, guidance programs, extracurricular activities, school philosophies, problems in supervision, curriculum planning, and community relations. The success of the workshop depends much upon the student knowing what he wants to accomplish; the procedure being flexible enough to support his purposes. He must have his proposed problems for study approved by the Director of the Workshop before he enrolls for the course.

The workshop is divided into five sections, as noted above. The student may enroll for four semester-hours of credit or for two, the four calling for two periods of scheduled time in the course daily, the two calling for one period of scheduled time in the course. The student taking the course for two credits enrolls for one of the five fields. The student taking it for four credits may do all the work in one of these five fields, or he may enroll for two hours of credit in one and two in another.

#### Education 602. Research Seminar in Guidance

4 s.h.

This course is designed to provide a laboratory situation for the exploration and study of the present practices with respect to the three major phases of the guidance program. Usually this seminar is given in conjunction with either Vocational (Education 582), Educational (Education 583), or Social-Moral (Education 584) Guidance. The major portion of the time is spent on field trips, in private investigation, and in research. Prerequisites: Educ. 580, 503, and 10 s.h. credit in Areas 2 or 3 of the Personnel and Guidance M.A. program.

#### Education 603. Principles and Practices of Research

The purpose of this course is to give students an opportunity to collect, analyze, and interpret data; to state the findings; to draw conclusions and generalizations; to write a research report together with an abstract; and to give an oral report.

This is an elective course in educational research. It may be substituted for a departmental research seminar upon the approval of both the departmental advisor and the chairman of the Education Department.

#### Education 604. Field Work in Guidance

4 s.h.

The aim of the course is to introduce the student to various aspects of guidance through experience in agencies actually dealing with such problems. Students observe and participate in activities of the agencies to which they are assigned and write full accounts of these observations and experiences. Some time is spent in discussing and evaluating these experiences and relating them to the literature of the subject. Prerequisites are: experience in teaching, familiarity with the literature on all aspects of guidance and mental hygiene, and Education 560, 562, and 580. This work is conducted by seminar and individual guidance. The hours for the conferences are arranged personally by student and instructor.

#### Education 606. Practicum in Guidance Services

2 or 4 s.h.

This course is designed to be a final summation of the counselor's preparation. It includes: investigation of programs in practice; development of guidance programs to meet specific school needs; evaluation of student personnel services. Prerequisite: Completion of a minimum of 20 s.h. in the Personnel and Guidance program.

#### SENIOR-GRADUATE COURSES

Most of the following courses are set up to serve graduate students as well as College seniors. To carry graduate credit, the course in question must be approved by the candidate's advisor.

#### Education 403. Supervised Student Teaching

8 s.h.

Ten weeks of student teaching in the public schools of New Jersey. The purpose of student teaching is to give the student an opportunity to relate theory to practice under skilled supervision; to offer a chance to evaluate his own strengths, weaknesses, and personal and professional needs; and to determine his readiness for responsible membership in the teaching profession.

#### Education 406. Educational Sociology

3 s.h.

This course deals with the application of sociological principles to educational problems. The school is treated as a part of the community, and the various social forces that affect the school and its administration are considered. The following topics are included: family backgrounds, community organization, social breakdown, social mobility, socialized classroom methods, and the social approach to individual behavior difficulties.

#### Education 408. Selection and Utilization of Audio-Visual Materials 2 s.h.

Sources, selection, and evaluation of audio-visual aids are studied in this course. Techniques in developing individual reference catalogs of audio-visual aids are stressed. The production of school-made aids is also an important aspect of the course. The use of the latest audio-visual equipment is demonstrated.

### Education 409. Radio and Sound Equipment in the Classroom 2 s.h

This course trains teachers and school executives in the use of radio programs, amplifying systems, recording equipment, and record players. Actual practice is given in the use of these educational aids. Problems of script-writing, microphone and recording techniques, and program directing are considered. The class visits radio stations for equipment and program observation. Each student develops a teaching unit using radio or sound equipment to vary, vitalize, and improve educational practices.

#### Education 410. Teaching Materials Workshop

2 s.h.

This course is for those persons who wish to study advanced problems in the utilization and administration of audio-visual materials. Individual research is stressed, and there is an opportunity to work out individual projects. Such problems as budget requirements, administrative set-up, establishment of film libraries, etc., are emphasized. It is assumed that the student will have taken Educ. 408 or will have had the equivalent in practical experiences.

#### Education 430. Interaction Analysis

3 s.h.

This is a course in the investigation of and experience in the problem of objectifying observable pupil-pupil-teacher relationships during the teaching-learning process. Students will develop skill in analysis through use of tapes and observation of elementary and secondary classes.

#### Education 431. Individual and Group Dynamics

3 s.h.

This course is a seminar laboratory experience designed to meet the needs of teachers, administrators, and supervisors in the areas of self understanding and effective human relationships. Focus is on individual behavior in learning groups and in supervisory conferences. Participation in actual group process provides opportunity for development of insight into the effects of one's behavior on others.

#### Education 440. Camping and Outdoor Education

2 s.h.

The purpose of this course is to familiarize the students with camping and outdoor education as educational methods utilized by the schools of America. The aims and methods of camping are studied, and consideration is given to the communities that have active camping and outdoor education programs in operation. The course also helps prepare the student for a position in summer camps. This course is usually given at the New Jersey State School of Conservation, Stokes State Forest.

#### **Education 441. Conservation Education**

2 s.h.

This course is designed to give teachers and prospective teachers a background for organizing and teaching conservation on various grade levels. The need for conservation, the various kinds of natural resources, and some of the modern methods for using and renewing these sources are considered. Field trips, laboratory experiences, visual aids, printed materials, and visiting specialists combine to make this a useful introductory course for all teachers.

#### Education 442. Practicum in Camp Leadership

2 s.h.

In this course the student has an opportunity to learn the techniques of camp leadership through practical experience, guided group study, and discussion. The practical experience comes through serving as a camp counselor in an actual camp situation. During this practical experience there are regular discussion sessions and assigned readings which help the student to gain a background of knowledge to help deal with the practical problems as they arise.

#### Education 443. Practicum in Camping Education and Administration 3 s.h.

This course is designed to provide practical experience in the identification and solution of problems arising in camp administration. Among the phases considered are discussion of current practices at both private and institutional camps. Interpretation of educational philosophies and objectives as they relate to camping, finances, personnel selection, waterfront organization, food purchasing, staff supervision, sanitation, health and safety, camp management, records and reports, insurance, kitchen management, maintenance, and other phases of camp administration. Practical application is provided through the techniques used in the children's demonstration camp. Prerequisite: Educ. 440 or permission of advisor.

#### Education 444. Practicum in Conservation Education

2 s.h.

This course is designed to provide teachers and supervisors with a background of experience and knowledge which will enable them to organize and to conduct conservation education programs in their own communities. Using an extensive library of conservation educational material, students formulate teaching units, lists of teaching aids, and projects suitable for use in their own communities. Participating in conservation projects with the children in the demonstration camp furnishes a practical background for research and discussion. Prerequisites: Educ. 441, Science 412, Science 413, or the equivalent.

#### Education 450. Psychological Foundations of Personality

3 s.h.

This course is concerned with the physical, mental, and cultural factors influencing personality development. Such topics as the nature of personality, mental health and patterns of deviation, and evaluation are considered.

#### Education 451. Guidance for the Classroom Teacher

3 s.h.

This course is designed as an introduction to the field of guidance for teachers who are concerned with problems of guidance and human relations in the classroom. This course is also designed to give the new teacher a picture of the place of guidance in the modern school, to indicate what guidance is and what is not, to indicate the techniques by which guidance is accomplished, and to identify some of the tools of the guidance counselor. (Cannot be used for credit toward the Master's degree in Personnel and Guidance.)

#### Education 452. Psychology and Education of the Handicapped

3 s.h.

This course is for the preparation of teachers of handicapped children and youth. It orients prospective teachers of regular classes to the special needs of those with handicaps of sensory, motor, intellectual, emotional, and neurological origins. Both the theoretical psychological aspects and the practical applications to the classroom are studied. The course includes analysis of case material. (Cannot be used for credit toward the Master's Degree in Personnel and Guidance.)

#### Education 453. Social Psychology

3 s.h.

This course focuses on the social behavior of the individual and the group. Attention is given to social perception, motivation, and learning; attitudes and values; the development and dynamics of social groups; intergroup tension and prejudice; and psychological approaches to public issues. (Cannot be used for credit toward a Master's Degree in personnel and guidance.)

#### Education 461. The Junior High School Curriculum

3 s.h.

Recent trends in the development of the junior high school curriculum and the relation of the curriculum to the aims, function, and organization of the junior high school are covered. Curriculum patterns in representative junior high schools are studied and evaluated. An opportunity is given to each student to develop units of work for junior high school subjects in the major of his choice.

#### Education 462. Survey of Reading Methods in Secondary School Subjects 3 s.h.

Planned especially for the inexperienced teacher in all subject matter areas, this introductory course outlines the role good reading plays in achieving both academic and personal success in every aspect of school life. New teachers will want an overview of: the physiological, psychological, and sociological factors in reading; resources available to the reading-minded teacher; and the school's responsibility for helping the student build an inventory of reading skills by utilizing reading opportunities in the entire curriculum.

#### Education 463. Reading and the Improvement of Study Skills

3 s.h.

This is a course in "How to Study" designed to prepare teachers to help juniorsenior high school students achieve greater effectiveness in their reading-study habits. After examination of recent materials and research, the class develops a series of practical methods for teaching and learning: the SQ3R approach, the best methods for taking examinations, the application of reading to problem solving, the development of memory and concentration, and the various techniques for taking and organizing reading notes, and the reading of homework assignments. (Not open to those who have taken Educ. 530C.)

#### Education 464. Foundations of Reading Instruction

3 s.h.

Good first reading is of primary importance in the sequential development of reading skills which extend into the junior and senior high school. In this course methods and materials currently in use in elementary reading programs are studied with a view toward increasing the power of both the teacher and the learner. How the reading process begins, and how it is reinforced are topics fundamental to all upper grade teachers who are faced with the problem of continuing reading skills development in all curriculum areas. (Not open to those who have taken Educ. 532.)

### Education 465. Colege Reading and Study Improvement Laboratory 3 s.h.

This workshop course is designed for those college students who feel that reading-study problems are interfering with their normal school progress. Students engage in supervised practice experiences which promote vocabulary growth, more flexible reading speeds, comprehension and recall improvement, skimming competency, and better interpretative and critical reading techniques. Particular attention is given to reviewing for examinations, keeping up with daily reading assignments, taking notes, and organizing the reading content into main and sub-topic structure. Students may volunteer for this course or be recommended by a faculty member.

# Education 466. Diagnosis and Treatment of Secondary School Reading Problems 3 s

3 s.h.

This is a course designed to introduce teachers to the problems of the handicapped reader. Following an examination of recent materials and research, the class develops a representative repertoire of methods for evaluation and correction. Prerequisites: Educ. 464 or equivalent.

#### Education 492. Comparative Education

3 s.h.

The educational systems of Europe, Asia, Africa, and Latin America are studied in an attempt to gain insight into the essential qualities of American education. In this process the relationship between the educational system of each culture and its history, economy, and political and social organization should emerge. Factors causing progress and change in education since 1900 are observed.

#### Education 493. Recent Trends in European Education

6 s.h.

This is a field-study course covering a period of approximately six weeks of seminars and of observation and visitation to school systems in Western Europe. Present educational policies and practices in selected European countries are studied with particular reference to economic, political, and social forces shaping their cultures. Similarities and contrasts among European and the American educational systems are analyzed.

2-4 s.h.

# DEPARTMENT OF ENGLISH

Graduate Advisor: DR. HAROLD C. BOHN

Graduate study in the Department of English is designed:

- 1. To broaden the understanding and appreciation of the culture of the Western World through extended study of the literature of Great Britain and the United States, of those European nations which have contributed much to our American heritage, and of those Oriental and other nations now exerting an increasing influence upon the modern world.
- 2. To examine the function of English language communication in the modern world through study of its historical development, its psychological nature, its critical expression, and its practice in the language arts.
- 3. To enrich the professional background of English teachers through investigation of research and experimentation designed to improve instruction in English in the secondary school.

#### REQUIREMENTS FOR THE M.A. DEGREE IN ENGLISH

#### **Admission to Program**

A student with an undergraduate major or minor of at least 24 semester hours in English is admitted subject to general College graduate admission requirements as stated elsewhere in this catalog.

- I. General Education (see Master's Degree Program Pattern) 6-12 s.h.
- II. Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h.
- III. Specialization 11-20 s.h.

A. American Literature
From the following courses: Eng. 525, 529, 533, 537, 538, 543, 546A, 546B, 546C, 546D, 441, 442, 461, 462.

- B. English Literature 4-6 s.h. From the following courses: Eng. 501, 502, 503, 504, 506, 508, 509, 510, 518, 521, 524, 531, 532, 535, 540, 544A, 544B, 544C, 422, 423, 431, 433, 441, 442, 461, 462.
- C. World Literature 2-4 s.h. From the following courses: Eng. 500, 511, 513, 514, 520A, 520B, 522, 526, 527, 528, 530, 534, 536, 539, 548, 453, 454, 461. 462.
- D. Language and Communication 2-4 s.h.

  From the following courses: Eng. 507, 512, 516, 517, 523, 541, 408, 409, 419.

  In addition to or in lieu of English courses in Language, courses in Speech (Speech: 550, 565, 410, 435, 448, 449, 456, 461A, 461B, 462, 466, 468).
  - (Speech: 550, 565, 410, 435, 448, 449, 456, 461A, 461B, 462, 466, 468 and/or courses in Reading Educ.: 550, 551, 552, 553) are acceptable, especially if the candidate wishes to augment his skill as teacher of Speech or Reading along with his English teaching.
- E. English Research Writing 2 s.h. English 603 is required of all candidates for the degree. The subject of the research will determine the area of specialization (American Literature, English Literature, World Literature, Language and Communication) to which this course is assigned for credit.

#### IV. Comprehensive Examination

To receive the degree of Master of Arts in English, each candidate must pass a written comprehensive examination in March before the granting of the

degree at the June Commencement or the Fall Convocation.

This examination is designed to test the candidate's mastery of the History of Literature, the techniques of literary expression, technical matters of writing, and Linguistics. He will also be expected to have a knowledge of the professional skills needed to teach these various aspects of English.

This mastery is partly obtained from the courses taken leading to the degree; largely, however, the candidate must assume the responsibility of preparing himself independent of courses. He is expected to keep informed about current literary and

teaching items of importance.

Sufficient choice is provided so that each candidate should be able to find a sufficient number of questions related to his complement of courses to meet the

required number of answers.

Each candidate who has declared to the Graduate Office his readiness to take the examination, given only once a year in the Spring Semester, will be notified of date, time, and place.

Minimum: 32 s.h.

#### **GRADUATE COURSES**

#### Eng. 500. Greek Classical Drama

2 s.h.

All of the extant plays of Aeschylus, Sophocles, Euripides, and Aristophanes are studied in detail. Attention is devoted to usage of Greek mythological material, to dramatic structure, and to the philosophy of each author.

#### Eng. 501. Anglo-Saxon

2 s.h.

Both the literature and the language of the Anglo-Saxon era are stressed. Specimens of alliterative poetry, including excerpts from Beowulf and of religious prose and The Anglo-Saxon Chronicle are read as literary art and as milestones in the history of English writing. Structure and vocabulary are investigated as the pedestals upon which rests the edifice of modern English.

#### Eng. 502. Victorian Poetry

2 s.h.

The most important English poets who wrote during the transition from the Victorian to the modern period are read, analyzed, and discussed: Rossetti, Swinburne, Hardy, Bridges, G. M. Hopkins, Francis Thompson, A. E. Housman, Kipling, and Yeats.

#### Eng. 503. Geoffrey Chaucer

2 s.h.

Some of the works of Chaucer are studied intensively, while others are read rapidly, so that the student may acquire a broad general understanding of Chaucer's place in the history of English literature as well as facility in reading and interpreting the medieval text.

#### Eng. 504. Elizabethan and Jacobean Dramatists

2 s.h.

This course deals with the men who inspired and rivaled Shakespeare. Marlowe, Dekker, Chapman, Jonson, Beaumont and Fletcher, Webster, and Ford are read for their own sakes and for the light they throw upon Shakespeare.

#### Eng. 506. John Milton

2 s.h.

The understanding and evaluation of Milton's poems are primary aims. Contributory are the following: Milton's literary heritage and influence, his position of leadership in the Puritan struggle for civil and religious liberty as revealed in his prose writings, and biographical materials.

#### Eng. 507. Critical Writing

2 s.h.

This course is primarily an examination of critical articles relating to major literary figures. Besides reacting to these examples of literary opinion and scholarship, students are asked to develop a consistent set of critical principles and to apply these to the work of some outstanding author.

#### Eng. 508. English Renaissance Non-Dramatic Poetry

2 s.h.

Poetry from Skelton through the Metaphysical poets is studied. Attention is given to sonnet sequences, broadside ballads, miscellanies, and prosody.

#### Eng. 509. English Prose Writers of the Nineteenth Century

2 s.h.

Influential prose writers of the nineteenth century, such as Carlyle, Macaulay, Ruskin, and Arnold are examined in detail. Their effect on the intellectual temper of the century is emphasized.

#### Eng. 510. Samuel Taylor Coleridge

2 s.h.

Since Coleridge reflects all the cultural currents of the Romantic era, this course approaches the aesthetic and intellectual life of that age through the poems, essays, lectures, philosophical writings, and letters of Coleridge. It also considers portions of the vast body of Coleridge scholarship.

#### Eng. 511. The History of Literary Criticism

2 s.h.

2 s.h.

Great critics from Aristotle to I. A. Richards and T. S. Eliot are reviewed. Four major critical orientations are explored to bring modern criticism into focus.

#### Eng. 512. The Growth and Structure of the English Language

Concerned with the historical background necessary for an understanding of the English language as it is spoken and written today, the course emphasizes the following areas of study: the nature and origin of language; the ancestry of English; the early growth of English; sources of the vocabulary and the making of words; changing meanings and values of words; syntax and usage; concern with dictionaries, spelling, pronunciation, variations, and standards in the modern period.

#### Eng. 513. The Renaissance

2 s.h.

This course deals with Petrarch and the Humanists; Boccaccio and the Novelle; Machiavelli and The Prince; Cellini and the Autobiography; Castiglione and The Courtier; Boiardo, Pulci, Ariosto, and the romantic epic; the drama; Rabelais and Gargantua and Pantagruel; Ronsard and the French Pleiade; Cervantes and Don Quixote; the art of DaVinci, Botticelli, Michelangelo, Raphael, Titian, and others; and the House of the Medici, Savonarola, the Popes.

#### Eng. 514. Origin and Development of the Arthurian Legend

2 s.h.

This course deals with the vague and tentative beginnings of the Arthur story in early chronicle legend; with Geoffrey of Monmouth's pseudo-historical and Chretien de Troye's romantic treatments; with the great medieval recapitulations of Gottfried von Strassburg, Wolfram von Eschenbach, and Sir Thomas Malory; with the Victorian retellings of Tennyson, Arnold, and Morris; with the musical adaptations of Wagner; and with the modern versions of E. A. Robinson. It includes a detailed history of the development of the legend in its diverse forms.

#### Eng. 516. Language Problems in the English Curriculum

2 s.h.

The purpose of this course is to enrich the student's sensitivity to an understanding of language. Theories of language and the cultural histories of words are reviewed and applied to the problems of reading, composition, and speech. The course is conducted as a seminar.

#### Eng. 517. Recent Research and Experiment in the Teaching of English. 2 s.h.

Recent experiments in methods of teaching English, and current research in the fields of language, literature, and composition are examined and evaluated. The purpose of this examination is to throw light on problems of teaching English in the secondary school, and to indicate the helpfulness of trends and developments.

#### Eng. 518. The Major Romantic Poets

2 s.h.

The poems of Wordsworth, Coleridge, Byron, Shelley, and Keats are emphasized. Pre-Romantics—Blake, Burns, and Scott—and minor Romantics are considered. Poetic theory as enunciated by the poets themselves is studied.

### Eng. 520A and 520B. Great Books on Education

2 s.h. each

Students examine the classics dealing with educational theory and practice which they so often read about but rarely consult.

Part A deals with Plato's Republic, Xenophon's Cyropaedia, Cicero's De Oratore, Castiglione's The Courtier, Machiavelli's Prince, Rabelais's Abbey of Theleme, Ascham's Schoolmaster, Bacon's Novum Organum, Defoe's Projects, Milton's To Samuel Hartlit on Education.

Part B deals with Rousseau's Emile, Byron's Don Juan, Hughes' Tom Brown's Schooldays, Newman's Idea of a University, the Arnold-Huxley debates, and the works of John Dewey and Jacques Barzun.

This course is recommended for graduate students in the Department of Education.

#### Eng. 521. English Literature of Social Problems

2 s.h.

Social problems implicit in all literature are considered. Special emphasis is placed on authors who were keenly aware of the social implications of their work. Langland, Chaucer, Shakespeare, Jonson, Milton, Swift, Fielding, Smollett, Dickens, Carlyle, Galsworthy, Wells, and Shaw are among the writers read and discussed.

#### Eng. 522. Contemporary European Literature

2 s.h.

"Contemporary" is here defined as the period from the end of World War I to 1960. The great writers on the Continent, of this period—Gides, Proust, Mann, Kafka, with others—will be read extensively, and discussed intensively.

#### Eng. 524. Contemporary British Literature

2 s.h.

Important British literary contributions since 1945 are studied, as they reflect recent history, trends and philosophies. Included are writers such as C. P. Snow, Joyce Cary, George Orwell, William Golding, and Iris Murdoch.

#### Eng. 525. The Development of the American Novel

2 s.h.

The American novel from 1789 to the present is examined. Beginning with the novels of the early Nineteenth Century, the course traces the rise and development of the Romantic and Realistic novel and concludes with an example of American Naturalism. Written criticism of five novels is required.

#### Eng. 526. Theory of the Novel as a Literary Form

2 s.h.

Henry James said: "The novel is the most prodigious of literary forms." Yet only beginning with himself, about 1880, did a systematic treatment of the origin, development, and craft of the novel begin to appear. Criticism today is doing for the novel what Aristotle's *Poetics* did for Greek tragic drama, and what Coleridge and Wordsworth did for modern poetry. Prerequisite: A course in the History of the Novel.

#### Eng. 527. The Major Philosophies of Life

2 s.h.

Man's cultural evolution reveals six or seven basic philosophies of reality and life. Illuminating correlations between individual temperaments, cultural epochs, and styles of living, will be shown. Designed to stimulate the student to apply discussions and readings to his own life and culture.

#### Eng. 528. New Perspectives in World Literature

2 s.h.

Literatures of the Orient, the Middle East, Africa, and South America are read and interpreted in relation to Western World Literature to create a world perspective through understanding of the interrelations of literature.

#### Eng. 529. The Development of American Poetry

2 s.h.

A survey is made of the complete sweep of American poetry from the earliest times to the present. Attention will be given to all major patterns, movements, and other literary developments.

#### Eng. 530. Dante and His Influence in England and America

2 s.h.

Fully two-thirds of this course is devoted to rereading and reassessment of Dante in English translation. When Dante's meaning has been revealed, his continued influence from Chaucer through Sackville, Spenser, and Milton to Rossetti, Longfellow, and T. S. Eliot becomes the subject of investigation.

#### Eng. 531. Seventeenth Century English Literature

2 s.h.

The style and content of such prose writers as Bacon, Burton, Walton, Hobbes, Bunyan, Pepys, and Dryden are investigated. Similarly, the poetic expression of experience in Donne, Jonson, Herbert, Herrick, Cowley, Vaughan, Suckling, Lovelace, Waller, and others is studied.

#### Eng. 532. The Victorian Novel

2 s.h.

The novel of Victorian England is studied intensively. A review of the development of the English novel before this period is followed by studies in the works of Dickens, Thackeray, Eliot, Trollope, Meredith, and Hardy. Special attention will be given to novels suitable for high school study.

#### Eng. 533. Masters of American Literature

2 s.h.

Significant American writers, such as Bryant, Emerson, Franklin, Howells, Irving, Melville, Poe, Twain, and Whitman, are studied to discover their contributions to American life and to reveal important forces in our national background.

#### Eng. 534. Medieval Epic, Saga, and Romance

2 s.h.

The chief medieval epics, sagas, and romances translated into modern English from the literatures of England, France, Germany, Ireland, Iceland, Wales, and Italy are reviewed. Attention is given both to those narratives which reflect the life of a particular country and to those which are international and express more generally the spirit of medieval Europe.

#### Eng. 535. Eighteenth Century English Literature

2 s.h.

Major essayists, poets, dramatists, novelists, and letter writers are read and evaluated in terms of the thought, life, and literary movements of their own time and in terms of their significance for the present generation. Authors studied include Addison, Steele, Defoe, Swift, Goldsmith, Sheridan, Gray, Johnson, Boswell, Cowper, Richardson, Fielding, Sterne, Smollett, and Gibbon.

#### Eng. 536. Philosophy in Great Literature

2 s.h.

The study of a few masters of literature, such as Dostoievski, Tolstoy, Mann, Proust, aims at giving the student a deeper insight into the life-views and worldviews which have shaped the consciousness of modern Western man.

#### Eng. 537. American Drama in American Democracy

2 s.h.

Plays produced on the American stage from Colonial to contemporary times are read and studied to illustrate the development of democratic concepts.

#### Eng. 538. American Literature of Social Problems

2 s.h.

American literature reflecting social problems from 1800 to 1914 is surveyed to discover the attitudes of various authors toward these problems. Such authors as Cooper, Lowell, Thoreau, Whitman, Howells, Bellamy, Garland, and Glasgow are studied from this point of view.

#### Eng. 539. Theater and Society

2 s.h.

Dramatic expression from ancient Greece to the present is studied to observe and appreciate social, political, and ethical trends reflected in the drama. Social trends in contemporary drama receive special attention.

#### Eng. 540. T. S. Eliot

2 s.h.

All of the works of Eliot—poems, plays, and critical essays—will be read. A survey will be made of his influences on his immediate circle, on the poets and critics of the Nashville Group, and on the New Criticism. The reasons for his dominating position in the world of English and American letters during forty-odd years will be assessed.

#### Eng. 541. The New Grammar

2 s.h.

New grammatical theories are introduced. The most essential details of structural and generative grammar are contrasted with traditional syntax. The relationship between a knowledge of grammar and the ability to write is evaluated in terms of teaching methods.

#### Eng. 543. Contemporary American Literature

2 s.h.

Major authors and literary movements in contemporary America are studied. Writers of prose, poetry, and drama are included.

#### Eng. 544A, 544B, 544C. Shakespeare

2 s.h. each

Part A deals with the tragedies. Shakespeare's development as a writer of tragedy, his concept of the tragic, and the diversity of characters who embody this concept are studied in the light of critical traditions and the history of Shakespearean stage production.

Part B deals with the comedies. Shakespeare's development as a writer of comedy, his masterful understanding of the large function of comedy, and the variety of situations and characters exhibiting this function are critically studied.

Part C deals with the English chronicle plays and with Roman plays. Shake-speare's use of history in these plays is considered first as history and then as history presented dramatically and poetically.

# Eng. 546A, 546B, 546C, 546D. Giants in American Literature: Hawthorne, Henry James, O'Neill, Faulkner 2 s.h. each

A careful comprehensive study will be made of one of these giants of American Literature. Emphasis will be placed, not only on the significance of his individual works, but also on his influence on American thought and literary patterns. Each of these authors will be considered for an entire course.

#### Eng. 548. Fiction as an Image of World History

2 s.h.

A sequence of historical and cultural novels is presented to give insight into the epochs involved. Great historical novels pertaining to Hebrew, Egyptian, Greek, Roman, Medieval, Renaissance, and modern times are discussed.

#### Eng. 603 English Research Writing

2 s.h.

This seminar course is designed primarily to provide an opportunity for graduate students in English to investigate and apply the techniques of research in the English field. Prerequisite: Educ. 503.

### **SENIOR-GRADUATE COURSES**

#### Eng. 408. Advanced Creative Writing

3 s.h.

The nature of the creative process in the arts in general is studied as it relates to creative writing. Through work on an extensive creative writing project, the student's creative writing ability is further developed. Methods of teaching creative writing are studied. Prerequisite: Eng. 104, or equivalent.

#### Eng. 409. Playwriting

2 s.h.

Lectures and discussions focus on the nature of dramatic dialogue, on problems of form and structure, and, most importantly, on the part which a script plays in a total dramatic production. There is opportunity for exercises in writing dramatic scripts, from the brief skit to the one-act play.

#### Eng. 419. Theories and Teaching of Grammar

3 s.h.

The new linguistics approaches to the study and teaching of English grammar are introduced and a survey presented of the extent to which the "new" grammar is being programmed for grade and secondary schools. The rules of grammar and writing proficiency are related so that the future teacher may be enabled to secure better response from his students.

#### Eng. 422. Survey of British Literature to 1798

3 s.h.

All forms of British Literature, except drama and fiction, from the beginnings to the triumph of romanticism in 1798, are systematically surveyed. Chronology, development, and the transmission of influences and traditions through the centuries are studied.

#### Eng. 423. Survey of British Literature

3 s.h.

British literature from 1798 to the present is surveyed. Prerequisite: Eng. 402.

#### Eng. 431. The Age of Chaucer

3 s.h.

The student is introduced to medieval literature in England. Portions of Chaucer, Gower, Wycliffe, and Langland are read in Middle English. Other writings and their cultural setting are treated in lectures, discussions, and term papers.

#### Eng. 433. Shaw, Galsworthy, and Wells

3 s.h.

These eminent writers of the first half of the Twentieth Century will be read and discussed to understand their attitudes toward society and to examine the contrasts in their ideas and styles.

#### Eng. 441. Modern Poetry: French Symbolists to T. S. Eliot

2 s.h.

Representative Symbolist, Georgian, and Imagist poets are studied in depth in order to examine the theories and principles upon which Modern Poetry is based.

#### Eng. 442. Contemporary Poetry: W. H. Auden to the Present

The distinctive poetry movements that have occurred since the Imagists are examined through the study in depth of representative poets. Critical appreciation is developed through comparison of diverse styles, themes, and poetic theories. Recommended prerequisite: Modern Poetry 441.

#### Eng. 453. Theme, Form, and Idea in the Drama

2 s.h.

2 s.h.

The analytical perspective needed in all evaluations of drama, new or old, is given. To this end, theme, form, and idea in dramatic history are investigated. Selected plays from Aeschylus to the present are arranged for the study of these components.

#### Eng. 454. The Film and Society

3 s.h.

The film is studied and evaluated as an art form, an educational device, a social force, and an entertainment medium. The history of motion pictures, film techniques, and the scenario as a literary type are examined. Numerous films are shown, analyzed, and discussed.

#### Eng. 461. Biography: Its Form and Function

3 s.h.

Selected biographical writings, including autobiography, diary, and memoirs, from medieval England to contemporary American Pulitzer Prize biographies, are examined. Study emphasizes both changing concepts of the form and also revelations of the nature, character, and varied destinies of human personality.

#### Eng. 462. Autobiography

3 s.h.

The world's major autobiographical writing as it appears in the memoirs, diaries, and journals of some of the greatest political and literary figures will be evaluated. Beginning with autobiographical expression in ancient times, the reading proceeds chronologically. A deeper insight into the life and times of these figures in terms of their significance for contemporary life is emphasized.

#### GENERAL EDUCATION COURSES IN ENGLISH

The following course may be chosen by matriculated students (other than English majors) to meet the requirements in General Education outside their specific area of specialization:

English: 500, 507, 509, 518, 520A, 520B, 521, 522, 524, 527, 528, 535, 536, 537, 538, 539, 543, 548, 408, 409, 441, 442, 454, 461, 462 or any other course with permission of the Department of English.

## DEPARTMENT OF FINE ARTS

Graduate Advisor: DR. LILLIAN A. CALCIA

The graduate program in Fine Arts leading to the Master of Arts degree is intended:

- a. to offer to Fine Arts teachers in the New Jersey public schools an opportunity to gain further professional preparation for the improvement of their teaching skills.
- b. to provide an opportunity for students to extend, intensify, and enrich their undergraduate program of general education in order that they may become better informed and more responsible citizens of a changing society.
- c. to assist students to acquire a more advanced and comprehensive grasp of the major problems, issues, and techniques of professional education.
- d. to provide an opportunity for students to extend their knowledge and experience in their field of specialization.
- e. to encourage the spirit of scientific inquiry and creative, original, and independent thought by providing training and experience in educational research.
- f. to provide experience designed to develop in students desirable personal and social qualities of democratic citizenship.
- g. to encourage the teacher to gain the requisite status for professional advancement.

#### Admission Requirements and Screening Procedures:

- a. The requirements established for all graduate studies and for matriculation at the College will be followed in respect to this program.
- b. Matriculation normally requires prior completion of the basic courses in art education needed for New Jersey certification to teach art in the secondary schools (grades 7-12) or in the elementary and secondary schools (grades K-12).
- c. Special provision is made in this program to matriculate certified elementary teachers who have an interest and ability in art, and who wish to improve their art background. This is a very rewarding program for some elementary teachers, but students are cautioned that this M.A. program will not automatically certify elementary teachers as art teachers since this special area certificate requires additional course work (24 s.h. for secondary certification and 40 s.h. for elementary-secondary certification).

## REQUIREMENTS FOR THE M.A. DEGREE IN FINE ARTS

I.	General Education (see Master's Degree Program Pattern)	6-12	s.h.
П.	Basic Professional Education (see Master's Degree Program Pattern)	6-9	s.h.
III.	Specialization Courses	11-20	s.h.
	F.A. 603. Seminar in Art Education	2	s.h.
	Required of all candidates (except students who elect Grad, 600	Mas	ter's
The	sis). Prerequisite: Educ. 503.		

The following courses will be elected by students subject to approval of the Graduate Advisor:

9-18 s.h.

#### 1. Art Education

F.A. 501.	Readings in Art Education	. 2 s.h.
F.A. 502.	Curriculum Construction in Art Education	. 2 s.h.
E A 603	Seminar in Art Education	2 0 5

2.	Art History and Philosophy
	F.A. 400. Philosophy of Art
	F.A. 402. Modern Philosophies of Art
	F.A. 411. History of Oriental Art
	F.A. 412. Primitive Art
	F.A. 413. History of American Art
	F.A. 453. Modern Art
	F.A. 492A, 492B. Selected Problems in Art History 2 s.h. each
	F.A. 620. Field Course in Art
2	Fine Arts
э.	
	F.A. 440. Home Design and Community Planning
	F.A. 445A, 445B, 445C, 445D. Life Drawing
	F.A. 451A, 451B. Painting: The Environment
	F.A. 452A, 452B. Multi-Media
	F.A. 460A, 460B, 460C, 460D. A Contemporary Art Form (Photog-
	raphy) 2 s.h. each F.A. 511A, 511B, 511C, 511D. Painting 2 s.h. each
	F.A. 521A, 521B, 521C, 521D. Sculpture
	F.A. 525A, 525B. Metalwork and Jewelry
	F.A. 531A, 531B, 531C, 531D, Ceramics
	F.A. 541A, 541B. Weaving 2 s.h. each
	F.A. 543A, 543B. Decoration of Fabrics 2 s.h. each
	F.A. 550. Silk Screen Printing 2 s.h.
	F.A. 551. Intaglio Printing
	F.A. 552. Woodcut Printing
	F.A. 553. Lithography
	F.A. 556. Lettering
	F.A. 557. Graphic Design
	2 s.h. each
A	Individual Study and Thesis
4.	
	Grad. 600. Master's Thesis
	F.A. 611, 612. Individual Study
	Minimum: 32 s.n.
	CDADUATE COURSES

#### **GRADUATE COURSES**

#### Fine Arts 501. Readings in Art Education

2 s.h.

This course is a study of the literature of the foundations of art education. Readings will be selected from philosophy, the social and behavioral sciences, and the history of art education. The implications of the developments in science and technology will be studied.

#### Fine Arts 502. Curriculum Construction in Art Education

2 ch

This course is planned for students with interest in curriculum construction or revision and includes both the elementary and secondary programs. A study of curricular materials in use in New Jersey and selected materials in use throughout the country will be made. Evaluation of these materials will be made in terms of principles of curriculum construction.

#### Fine Arts 503. Foundations of Art

2 s.h.

This is a survey course designed for public school administrators, guidance personnel, and teachers of disciplines other than art. It includes a study of the philosophy of art, the historical purposes of art, forms of art and their evaluation, and implementation of the objectives of art in education. Humanities elective for non-art majors.

## Fine Arts 511A, 511B, 511C, 511D. Painting

2 s.h. each

Studio in painting is designed to further the creative impression and technical knowledge of the student in various painting media. Emphasis will be upon personal and professional development through studio work, trips, and the study of the work of contemporary artists.

#### Fine Arts 521A, 521B, 521C, 521D. Sculpture

2 s.h. each

In these courses the student is expected to explore independently one or two materials and techniques and to begin to find his own directions as a sculptor.

#### Fine Arts 525A, 525B. Metalwork and Jewelry

2 s.h. each

Experiences in this sequence involve the designing of jewelry and small sculpture in varied metals and employing the techniques of flat sheet metal and casting.

#### Fine Arts 531A, 531B, 531C, 531D. Ceramics

2 s.h. each

Pottery and ceramic sculpture are included as forms of ceramic art. Instruction in basic aspects of forming, decorating, glazing and firing will be covered. Beyond this the work will be determined on an individual basis.

#### Fine Arts 541A, 541B. Weaving

2 s.h. each

Primary emphasis in this experience is on designing with simple and four harness table and floor looms in a variety of techniques and materials.

#### Fine Arts 543A, 543B. Decoration of Fabrics

2 s.h. each

In this area major emphasis is on designing of the fabric through block printing, silk screen printing, stitchery, hooking, applique, and dyeing techniques.

#### Fine Arts 550. Silk Screen Printing

2 s.h.

This course affords an opportunity to study and practice the graphic art techniques of silk screen from the creation of the master design through the construction of necessary printing facilities and printing. Experiences will include the use of tusche, glue, stencil lacquer, and photographic techniques.

#### Fine Arts 551. Intaglio Printing

2 s.h.

This course is designed to enable the graduate student to acquire additional competency and depth of experience in etching, dry point, aquatint, and soft ground. Stress is on critical evaluation of design integrated with printing techniques.

## Fine Arts 552. Woodcut Printing

2 s.h.

This course explores the fine art of the woodcut, and its relation to painting in color, size, and richness. The cutting of various woods and veneers is fully demonstrated. Different approaches of printing and inventiveness in using other materials in relation to wood are fully explored. The course includes lectures on prints of the past and field trips to important print exhibitions.

#### Fine Arts 553. Lithography

2 s.h.

This course is designed to provide opportunity for the student to acquire competency in the art of lithography. All steps from design and execution of master drawing to the finished print are covered. Studio experiences provide the student with first hand knowledge of tools, materials, and techniques of the lithographic process. Adaptation of the lithographic phase of print-making to classroom use is also studied.

## Fine Arts 556. Lettering

2 s.h.

This course provides a study of styles and techniques of lettering applied in such forms as manuscripts, signs, posters, display, and advertising layout. A brief introduction to typography is offered in the course.

## Fine Arts 557. Graphic Design

2 s.h.

This course is concerned with the techniques and principles of design of printed matter and displays. Design projects involve elements of layout, illustration, typography, printing processes, and preparation of copy for the printer.

#### Graduate 600. Master's Thesis

4 s.h.

## Fine Arts 603. Seminar in Art Education

2 s.h.

This course is designed primarily to afford the graduate student an opportunity to make an extensive study in the field of art education and in the related fields of psychology, and child growth and development. Prerequisite: Educ. 503.

#### Fine Arts 611, 612. Individual Study

2 s.h. each

Under this course designation, advanced students may extend their experience beyond the regular course offering in a chosen field or medium, to a maximum of 12 hours in the particular medium. Direction, conduct, and evaluation of the work are developed in consultation with the instructor. As a basis for admission and planning, each student will present a representative selection of his prior work in the chosen medium.

#### Fine Arts 620. Field Course in Art

2-6 s.h.

Travel courses to art sources in the United States and foreign countries will be accepted for graduate credit not to exceed 6 points. A general catalog description of these courses follows. Content and requirements will be set up as the courses evolve.

This course provides the opportunity to have a first-hand contact with the historic art forms of the places visited and to see contemporary artists and craftsmen in the process of creating art forms. Each student will select an area of study in which the places visited have rich art resources. As preparation for the course the student will outline his chosen study problem, read background material, and list sources he expects to utilize.

#### SENIOR-GRADUATE COURSES

#### Fine Arts 400. Philosophy of Art

2 s.h.

This course is designed to give the student a knowledge of the various theories of art and the nature of the art experience. Readings include the works of major philosophic writers, artists, and psychologists. Through discussion each student is encouraged to develop a personal philosophy of art education. For fine arts majors or by instructor's permission.

#### Fine Arts 402. Modern Philosophies of Art

2 s.h.

The work of the major writers in art in the Nineteenth and Twentieth Centuries is examined. Exploration is made in the nature of the creative experience, the function of art in the life of the individual and of society, the nature of the creative process, the rise of new materials, and institutions and sentiments affecting current thinking in the field. Discussions are based on readings of philosophers, poets, social scientists, psychologists, and artists. Elective for fine arts majors and a humanities elective for non-art majors.

## Fine Arts 411A, 411B. History of Oriental Art

2 s.h. each

Just as the art of the Italian Renaissance developed out of humanism and its man-centerd philosophy, so the art of the East grew out of equally strong,

although totally different (and even diametrically opposed) influences. This course examines the factors which shaped Oriental society and the rich art inventory that evolved in China, Korea, Japan, India, South East Asia, and the neighboring Islamic world. Slides, illustrations, and museum objects are studied not only as they mirror historic developments but primarily as objects of artistic excellence in themselves. An elective for Fine Arts majors and/or humanities elective.

#### Fine Arts 412. Primitive Art

2 s.h.

This course surveys the art of those people we generally call "primitive"—African and Oceanic—and of the various people of North, Central, and South America before the arrival of Columbus. Far from being the crude expressions of illiterate savages, their art appeals to modern man for the sophisticated, immediate, and forceful impact it makes. The major styles and sub-styles of the regions listed above are identified, through slides, illustrations, and examples exhibited in museums and galleries, and the works are discussed from the standpoint of their aesthetic contributions. An elective for Fine Arts majors and/or humanities elective.

## Fine Arts 413. History of American Art

2 s.h.

An examination of art in the United States from the Colonial period to the present, with special consideration given to the question of the development of an American "style" in the light of its relationship to, and dependence upon, European art. The landscape, portrait and genre traditions in the painting of the United States are studied, as well as developments of the Twentieth Century. Folk, classical, and modern expressions in sculpture will be surveyed as well as architecture from colonial dwellings to works of this century. An elective for Fine Arts majors and/or humanities elective.

#### Fine Arts 415. Designing in Native Materials

2 s.h.

In this course the student gains an appreciation and understanding of art expression growing out of the immediate environment as he works creatively with native materials. A new respect for the potentials of raw earth products is discovered through art experiences in keeping with good conservation practices. Flower and plant arrangements for room and table decorations are studied. Digging for clay, hunting for wood, seeds, grasses, and experimenting with dyes becomes an exciting adventure. (Offered at N.J. State School of Conservation. See this section of catalog.)

#### Fine Arts 440. Home Design and Community Planning

2 s.h.

The design of the home and the community for the full utilization of the knowledge and the resources of industry, engineering, science and art is the content of this course. Work of leading architects and city planners is explored as it fits into the solution of the problems of interest to the student and as a reflection of our contemporary cultural patterns. Trips to sources for home furnishings, model homes, well-planned communities are included in the course activities.

#### Fine Arts 445A, 445B, 445C, 445D. Life Drawing

2 s.h. each

This is a series of courses in the study of the structure and proportions of the human form with emphasis on expressiveness of drawing.

#### Fine Arts 451A, 451B. Painting: The Environment

2 s.h. each

This course offers experiences in an area of painting whose content depends essentially upon a personal vision of the outer world. The interpretation of land-scape as a unique source of pictorial ideas will be of first importance and the student will be encouraged to acquire concurrently some understanding of land-scape painting in art history. To this end study of styles achieved by master landscapists will be carried out with particular reference to their relevance in our

time. A variety of painting media will be used according to individual desire. An elective for Fine Arts majors only.

#### Fine Arts 452A, 452B. Multi-Media

2 s.h. each

This course will present an opportunity to bring together previous fine arts experience in painting, sculpture, and various aspects of theater arts.

The projects will be architectural and environmental in nature and will serve to introduce the student to both historical and contemporary ideas of "total-art." An elective for Fine Arts majors only.

#### Fine Arts 453. Modern Art

2 s.h.

This course is designed to survey through the use of visual materials such as slides, art films, and reproductions, and through discussion, the major influences and trends in the development of painting, sculpture, and architecture of this century. An elective for Fine Arts majors only.

## Fine Arts 460A, 460B, 460C, 460D. Photography: A Contemporary Art Form 2 s.h. each

The course emphasizes the role of the photographer as artist. Knowledge and skills of the craft of photography are developed within the context of the significant expression of ideas. This advanced course assumes knowledge of fundamental techniques.

## Fine Arts 462. Foundations of Painting

2 s.h.

This elective gives the non-art major an opportunity to explore the art form painting, in greater depth, following the Introduction to the Visual Arts, the required general education course. The various schools of modern and contemporary painting with reference to their precursors will be studied through readings, trips, and studio experiences. Humanities elective for non-art majors.

#### Fine Arts 467. Foundations of Home Design

2 s.h.

The design of the home and the community for the utilization of resources of industry, engineering, science, and art is the content of this course. Problems arising from current psychological, sociological, and economic conditions will be studied.

Modern and contemporary architecture and modern industrial designers will be studied to learn their contributions to modern living. This is a humanities elective designed to enlarge the student's experiences in this area beyond the required course, Introduction to the Visual Arts. Humanities elective for non-art majors.

#### Fine Arts 468. Foundations of Photography

2 s.h.

This course provides for the creative development of the individual in photography, through personal experiences, trips, films, discussions, lectures, criticisms, and demonstrations. Areas for exploration include documentary realism, romanticism, action photography, portraiture, and nature photography. Essentials of the photographic process including developing, enlarging, and exhibiting are covered. Humanities elective for non-art majors,

#### Fine Arts 469. Foundations of Teacher Arts

2 s.h.

The purpose of this course is to develop an increased interest and appreciation of the theater arts. Study in the allied areas of opera, musical comedy, and the dance, as well as the communication arts of the cinema and television, is made through trips, reading, and interviews. Special emphasis is given to the growing importance of the community theater. Construction of models is used to increase appreciation of contemporary stage and set designs. Outstanding designers are studied. Lighting demonstrations are arranged with cooperation of the Speech Department. Participation in campus theater experiences is encouraged. Humanities elective for non-art majors.

#### Fine Arts 470. Foundations of Textiles

2 s.h.

The art of textile is studied historically from primitive forms to contemporary development in methods and materials. Studies will be made of the contributions of the Peruvians and American Indians, as well as those of the Near and Far Eastern, Medieval, and Modern cultures. Studio experiences will be used to demonstrate these contributions in design and methods. Humanities elective for non-art majors.

#### Fine Arts 474. Arts and Crafts in Education

2 s.h.

Included in this course are workshop activities in the arts and crafts of the elementary and secondary school program. Painting, drawing, modeling, pottery, weaving, papier-mâché, paper structure, school display techniques, lettering, wood, leather, plastics, metal work, and puppetry are materials and processes which are explored. (Offered at N. J. State School of Conservation. See this section of catalog.)

#### Fine Arts 490. Art of the Nineteenth Century

2 s.h.

This course explores the major art movements of the Nineteenth Century in terms of the rapid changes of social, political, and artistic personalities. The rise of Classicism, Romanticism, and Realism; the salon at mid-century; the Impressionists and post-Impressionists are discussed as well. The work of this period is studied through illustrated lectures, museum trips, readings, and discussion. Humanities elective for non-art majors.

## Fine Arts 491. Art of the Twentieth Century

2 s.h.

This is a course designed to survey through the use of visual materials such as slides, art films, and reproductions, and through discussion and studio participation, the major influences and trends in the development of painting, sculpture, and architecture of the Twentieth Century. Humanities elective for non-art majors.

#### Fine Arts 492A, 492B. Selected Problems in Art History

2 s.h.

This is a seminar course dealing with selected art problems of historic, social, and philosophical nature. Some of the following topics are chosen for a detailed examination: the human figure in the history of art, the rise of landscape painting, Impressionism in the East and West, historical views of art criticism, the self-portrait, Romanticism and Realism, art and society, on Modern Art, art and the sciences, and the rise of "Isms," Methods for dealing with selected topics include lectures, readings, reports, and discussion.

#### Fine Arts 493. Masterpieces of World Art

2 s.h.

Designed for non-art majors, this introductory course studies key works of art representing prehistoric cultures, the ancient world, the East, the Renaissance, and the modern period, in reference to their historical and cultural settings and the personality of the artist. The course employs illustrated lectures, museum and gallery trips, readings, and discussion. Humanities elective for non-art majors.

#### General Education Courses in Fine Arts

The following courses may be taken by matriculated students (other than Fine Arts majors) to meet the requirements in General Education outside their specific area of specialization:

Fine Arts: 402, 411A and 411B, 412, 413, 415, 462, 467, 468, 469, 470, 474, 490, 491, 493, 503.

## DEPARTMENT OF FOREIGN LANGUAGES

Graduate Advisor: Professor Louis M. Roederer

It is expected that all candidates for the Master of Arts Degree will take French 505 or Spanish 505 and at least one of the two listed foundation courses, unless similar courses were already taken at the undergraduate level.

A candidate for the Master of Arts Degree may elect to write a thesis in lieu of four of the thirty-two semester hours of credit necessary for the degree, Plans for the thesis should be approved by the Department Chairman no later than one year prior to the anticipated date of graduation, and the work must be completed no later than four months before such anticipated date. It will be the responsibility of the student to observe these time limits.

General standards for matriculation will be as set forth in the College Graduate Bulletin. Individuals who do not wish to work toward the Master's Degree may enroll in the department with the approval of the Department Chairman.

Study abroad programs, previously required for admission at the Graduate School for French and Spanish majors, are now part of the elective courses offered by the Department either during the summer or on a yearly basis. Outlines of these programs will be found at the end of the list of elective courses. Further details may be obtained from the Graduate Advisor for the Department of Foreign Languages.

All courses are given in the language of the literature studied, except in Methods courses, such as Language 408.

## REQUIREMENTS FOR THE M.A. DEGREE IN FRENCH

I.	General Education (see Master's Degree Program Pattern) 6-12 s	s.h.
II.	Basic Professional Education (see Master's Degree Program Pattern) 6-9 s	s.h.
III.	Specialization 11-20 s	s.h.
	Required Courses	
	Language 603	s.h.
	French 505. History of the French Language	s.h.
	Foundation Courses (minimum 2 s.h.)	
	Language 408. Introduction to Language Laboratory	
	French 506. Advanced French Phonetics	s.h.
	Elective Courses 5-14 s	s.h.

These courses will be elected, with Departmental approval, and will be offered on a rotating schedule so as to enable students preparing for their Master's Degree to take at least one course on each century within a year, summer session included. Students specializing in French may elect some courses from other Foreign Language offerings.

Minimum: 32 s.h.

IV. Comprehensive Examination

Elective Courses

## REQUIREMENTS FOR THE M.A. DEGREE IN SPANISH

I.	General Education (see Master's Degree Program Pattern) 6-12	s.h.
II.	Basic Professional Education (see Master's Degree Program Pattern) 6-9	s.h.
III.	Specialization 11-20	s.h.
	Required Courses	
	Language 603 2	s.h.
	Spanish 505. History of the Spanish Language 2	s.h.
	Foundation Courses (minimum 2 s.h.)	
	Language 408. Introduction to Language Laboratory 2	s.h.
	Spanish 506. Advanced Spanish Phonetics	
	Flective Courses 5-14	

#### IV. Comprehensive Examination

These courses will be elected, with Departmental approval, and will be offered on a rotating basis so as to enable students preparing for their Master's Degree to take courses in both areas of Spanish and Spanish-American literature. Students specializing in Spanish may elect some courses from other Foreign Languages offerings.

Minimum: 32 s.h.

#### **GRADUATE COURSES IN FRENCH**

## French 505. History of the French Language (formerly Fr. 515) 2 s.h.

The course is designed to acquaint the student on the graduate level with the developmental processes in language with special reference to French. It examines also the relationship between language change and cultural change. The French language is studied from its origins to the present time with units in Vulgar Latin, Old French, Middle French, Renaissance French, and Modern French. At each step, development of phonology, morphology, and vocabulary are studied along with social backgrounds.

#### French 506. Advanced French Phonetics

2 s.h.

This course is designed to acquaint students on the graduate level with the principles of phonetics and their practical application in acquiring and teaching a correct French pronunciation. Some previous knowledge of phonetics is desirable.

#### French 510. Supervised Individual Study

or 2 s.h.

This course is designed to provide students with an opportunity to work in depth on a subject of special interest, or to make up part of a course in which the student has failed or shown specific weaknesses.

## French 511. Medieval French Literature (formerly Fr. 505)

2 s.h.

This course is designed as a survey of the origins and developments of the principal genres during the Middle Ages in France: chanson de geste, literature courtoise, fabliaux, chroniques, theater and poetry.

## French 516. French Literature of the Renaissance (formerly Fr. 506) 2 s.h.

This course is designed to give the student a comprehensive view of the literature and ideas of Sixteenth Century France, including the study of the following authors: Clément Morot, Ronsard, d'Aubigné, Montaigne, Rabelais.

#### French 526. Corneille and Racine

2 s.h.

This course is designed to acquaint students on a graduate level with the evolution of the classical theater in the Seventeenth Century. The dramatic art, psychology, and symbolism of Corneille and Racine will be analyzed through extensive reading and intensive discussion of their major plays. The student will be asked to evaluate the impact of these plays in written and oral reports.

#### French 527. Pascal and Descartes

2 s.h.

This course is designed to acquaint the student with the writings, ideas, and scientific achievements of Pascal and Descartes. Special emphasis will be put on Pascal's Pensées and Provincial Letters.

#### French 533. The Age of Enlightenment

2 s.h.

This course is designed to acquaint the student with the philosophical, educational, and social concepts of the century through intensive study of Voltaire, Montesquieu, Rousseau, and Diderot.

#### French 534. Le Sage, Marivaux, Beaumarchais

2 s.h.

This course will require extensive readings and analysis through oral and written reports of the most important plays of the time, including Turcaret, Le Jeu de l'amour et du Hasard, Le Mariage de Figaro and similar works.

#### French 538. The French Novel of the Nineteenth Century

2 s.h.

This course aims at offering the graduate student an insight into the role of masters of French fiction. Major works and literary criticism concerning them will be studied.

#### French 539. Survey of Nineteenth Century French Poetry

2 s.h.

This course is designed to offer the graduate student a survey of the development of French poetry from Romanticism through the Parnassian School to Symbolism. Important poems of Lamartine, Hugo, Vigny, Musset, Laconte de Lisle, Hereodia, Baudelaire, Verlaine, Rimbaud and Mallarmé are read and discussed.

#### French 542. The Contemporary Theater (formerly Fr. 407)

2 s.h.

The purpose of this course is to acquaint students on the graduate level with the history and development of the French theater since 1890. Major currents and trends in contemporary drama will be analyzed. Authors studied include Jules Romains, Paul Claudel, Henri de Montherlant, Jean Giraudoux, Jean-Paul Sartre, Albert Camus, and other dramatists representative of each major trend of the modern French theater.

#### French 543. The Contemporary Poets

2 s.h.

This course considers the development of French poetry from Symbolism to Surrealism and will include works from such poets as Baudelaire, Rimbaud, Verlaine, Mallarmé, Laforgue, Nerval, Apollinaire, Saint-John Perse, Supervielle, Eluart and Aragon. The aim of this course is to convey to the students a deeper appreciation of French peotry through a literary and historical approach and the study of the fundamentals: versification, the technical side of poetry and imagery, the language of poetry.

#### French 544. The Contemporary Novel (formerly Fr. 406)

2 s.h.

This course is designed to acquaint students on the graduate level with the history and development of the French novel from Proust to the present day. Major currents and trends are analyzed; works of modern novelists, including Proust, Gide, Malraux, Sartre, and Camus are read and discussed.

#### SENIOR-GRADUATE COURSES IN FRENCH

#### French 411. Study Abroad (formerly Fr. 502)

6-10 s.h.

This course is designed to give teachers and students an opportunity to gain first-hand knowledge of the historical, social, economic, and cultural life of France. This aim will be achieved through visits to various representative sites, tours, and lectures. The program will be conducted in French.

## French 421. French Language Seminar

2 s.h.

This course is designed to acquaint students on the graduate level with the effective use of the laboratory in language teaching. Problems relating to materials, methods, new techniques, facilities, and scheduling are discussed.

## **GRADUATE COURSES IN SPANISH**

#### Spanish 505. History of the Spanish Language

2 s.h.

A survey of the development of the Spanish language from its origin to the present day in Spain and Spanish America. The course traces the phonological,

structural and lexical evolution of Spanish from its Latin ancestor, by following the process of its transformation, as well as the various stages through which the language has passed from the time of its first documentary appearance.

## Spanish 506. Advanced Spanish Phonetics

2 s.h.

The course is especially designed for Spanish teachers who wish to acquire a correct pronunciation and enunciation according to the best patterns of speech of the Spanish language as it is spoken by the educated vernacular speakers of Spain and Spanish America.

#### Spanish 510. Supervised Individual Study

1 or 2 s.h.

This course is designed to provide students with an opportunity to work in depth on a subject of special interest, or to cover part of a course in which the student has failed or shown a special weakness.

## Spanish Area

#### Spanish 516. Survey of Medieval Spanish Literature

2 s.h.

A review of outstanding works and themes from Latin, Arabic, and Hebrew roots—expressing the main features of Spanish literature, culture, and thought from the Eleventh Century jarchas and cantarcillos de amigo through the Poema del Cid and culminating in La Celestina and the advent of the Golden Age.

#### Spanish 521. The Novel of the Golden Age

2 s.h.

A survey of its creation and development from earlier forms through a reading of representative works of the picaresque genre—from Lazarillo de Tormas to El Buscón—as well as the Novelas Ejemplares of Cervantes, emphasizing their ethical and artistic values and influence in the main stream of European literature.

#### Spanish 522. The Theater and Poetry of the Golden Age

2 s.n

Poetic currents of the Siglo de Oro beginning with the Renaissance period, from the lirica popular and the Romancero through the adoption of the Italian forms and metres and the mystic poets to the Baroque period. In the drama, representative plays of Lope de Vega, Tirso de Molina, Calderón de la Barca, and Ruiz de Alarcón are read and analyzed against the historical background of the Sixteenth and Seventeenth Centuries.

## Spanish 524. Seminar in Cervantes

2 s.h.

The course is designed to study Cervantes as a figure of synthesis in the art of the novel in Spain. El Quijote, the Novelas Ejemplares and Persiles y Segismunda will be analyzed. Oral and written reports will be prepared by the student.

#### Spanish 526. Spain in the Nineteenth Century

2 s.h.

This course will aim at providing an understanding of the historical, cultural and political developments of Nineteenth Century Spain. Readings and discussions of the most representative authors of the romantic, neo-classicist, and realistic trends.

#### Spanish 532. The Short Story in Spain (formerly Span. 430A)

2 s.h.

This course covers the study of the origin and development of the short story in Spain from the Middle Ages to the present time. Different types of short stories are studied in order to explain historically and sociologically the appearance of themes written in Spanish through the centuries. The aim of the course is to give the student additional understanding of the Spanish people, their culture and history, as expressed by the short story from the Thirteenth Century to the present.

## Spanish-American Area

## Spanish 540. Sarmiento and His Times

2 s.h.

The purpose of this course is the study of the culture and civilization of the Rio de la Plata region and Chile from the period of Independence to the beginning of "Modernismo" through the most important figure of this period. Relations with the United States will be discussed.

#### Spanish 541. Spanish-American Novel (formerly Span. 506)

2 s.h.

The purpose of this course is to acquaint the student, through extensive reading and intensive discussion, with representative Spanish-American novels from the Sixteenth Century through the Twentieth Century. These works include narratives depicting life in early colonial times; the novel of adventure; the picaresque tale; the romantic novel; the psychological novel; the novel of the land; the sociological novel; the artistic modernista novel; the political novel; the novel of the Mexican revolution; the social, the neorealistic, the impressionistic, and the philosophical novel.

#### Spanish 546. Seminar in Modernismo

2 s.h.

A critical re-evaluation of the "Modernist" phase of Spanish-American poetry: 1882-1917. Special emphasis will be given to individual techniques and characteristic use of specific images, the reliance on Synesthesia, and the attempt to incorporate pictorial elements into poetry which welded these individuals into a genuine poetic movement. Each participant is expected to present a piece of original research at a designated time during the course-term.

#### Spanish 548. Spanish-American Essay

2 s.h.

A careful reading of selected Spanish-American authors representing a cross section of all Spanish-speaking social classes and tendencies in order to evaluate their reactions through their written expressions. A comparison of the main essayists with their contemporaries in Spain and in the United States will show the tenor of political thought, inter-influences between the United States and Spanish-America, and the most important viewpoints of Spanish-American intellectuals.

## Spanish 549. The Short Story in Spanish-America (formerly Span. 403B) 2 s.h.

This course will cover the development of the Spanish-American short story from its origins in the Colonial Times. Representative authors will be included to show the evolution of the genre up to the present time.

## Spanish 551. Contemporary Spanish-American Poetry (formerly Span. 425) 2 s.h.

This course considers the development of Spanish-American poetry from the anti-modernist reaction, and the four major feminine poets, as antecedent for the appreciation and evaluation of Neruda, Pellicer, Mareschal, Borges, Gorostiza, Carrera Andrade, Florit, Villaurrutia and Octavio Paz. Readings from recently published books and poetry magazines of wide circulation in Spanish America are included.

## SENIOR-GRADUATE COURSES IN SPANISH

#### Spanish 403. Projects in Spanish and Spanish-American Folklore 3 s.h.

The purpose of this course is to acquaint the student with the different folk-lore expressions of the Spanish Peninsula, as well as of the Spanish-American countries, including its music, dancing, and traditions and their application to the classroom. To be offered as a required course to majors and also as an elective to other students and teachers from the outside who satisfy the requirements of the department.

## Spanish 410. Advanced Composition

2 s.h.

This course is designed to improve the student's mastery of the language through written and oral exercises accompanied by a review of advanced grammar.

## Spanish 411. Study Abroad (formerly Span, 502)

6-10 s.h.

This course is designed to give teachers and students an opportunity to gain first-hand knowledge of the historical, social, economic, and cultural life of Spain. This aim will be achieved through visits to various representative sites, tours, and lectures. The program will be conducted in Spanish.

## **GRADUATE COURSES IN LANGUAGE**

#### Language 603. Foreign Language Research Seminar

2 s.h.

This seminar is designed primarily to provide an opportunity for graduate students in foreign languages to investigate and apply the techniques of research in the foreign language field, Prerequisite: Educ. 503 and matriculation for M.A. degree in foreign language department.

#### SENIOR-GRADUATE COURSES IN LANGUAGE

#### Language 408. Introduction to Language Laboratory

2 s.h.

This course is designed primarily to acquaint language teachers with techniques of language-laboratory utilization and with the preparation of materials for use in the laboratory. Attention is given to equipment—its selection, operation, utilization, and basic maintenance. The course is open to all teachers of foreign languages and to audio-visual specialists, and is taught in English.

#### Language 410A. Roman Civilization to Imperial Times

2 s.h.

Rome's contribution to Western Civilization is studied through her architecture, art, literature, science, and sculpture.

#### Language 410B. Roman Civilization During the Empire

2 s.h.

This course is designed to acquaint students and teachers with the Roman Conquest of Europe, with emphasis placed upon the planting of Roman culture and civilization. The course will provide a background of history and archaeology for all Latin programs. It is particularly recommended to those who will take Lat. 406.

#### Language 411. Greek Civilization

2 s.h.

Greece's contribution to Western Civilization is studied through her architecture, art, literature, and sculpture.

## Language 412. Foundations of Language

2 s.h.

This course introduces the study of linguistics in general and of the Indo-European group in particular. It focuses upon the origin, history, and development of Languages. Through lectures and readings the student is acquainted with the latest research findings in linguistics. An individual report on some phase of this field is presented by every student.

## General Education Courses in French and Spanish

The following courses may be chosen by matriculated students (other than French & Spanish majors) to meet the requirements in General Education outside their specific area of specialization:

Language: 410A. Language 410B. Language 411. Language 412. or possibly other courses with permission of the Department of Foreign Languages,

## DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION

Graduate Advisor: DR. JOHN REDD

The graduate program in Panzer School of Health and Physical Education is designed to increase the knowledge, understanding, and techniques of the inservice teacher. Emphasis will be given to the preparation of teachers for specialized work or master teaching in health and physical education. The techniques and skills of research are developed to enrich and improve the programs of the schools in New Jersey.

A major or minor in health and/or physical education from an accredited college or university constitutes a minimum requirement for admission. Other admissions requirements are discussed elsewhere in the Graduate Bulletin.

A candidate for the Master of Arts Degree in Health and/or Physical Education should consult the Graduate Advisor of the Panzer School of Health and Physical Education before matriculation. The student with a minor preparation in health or physical education will be requested to undertake designated prerequisites as a part of his program. The student with a major in the above fields may be requested to undertake additional work where deficiencies are apparent. The prerequisite requirements will be in addition to the minimum 32 semester-hour work program.

A comprehensive written-oral examination is required of all candidates for the Master of Arts degree with the exception of those students who elect Graduate 600, Master's Thesis, in which the student earns four semester-hours credit.

## REQUIREMENTS FOR THE MASTER'S DEGREE 11

IN HEALTH OR PHYSICA	L EDUCATION
I. General Education (see	Master's Degree Program Pattern) 6-12 s.h.
II. Basic Professional Educa	ation (see Master's Degree Program Pattern) 6-9 s.h.
III. Specialization	11-20 s.h.
Education. Each sequence w selected from either area with	concentration in either Physical Education or Health rill have certain required courses. Electives may be hin the limits outlined under Elective Courses below nester hours of required and elective courses under
A. Required Courses—P	Physical Education Sequence 12 s.h.
Education and H	on 603. Research Seminar in Physical fealth
	dations and Interpretation of Physical ation
P.E. 577. Admi	culum Development in Physical Education; or nistration and Supervision of Physical ation
4. P.E. 578. Physic	cal Education for Exceptional Children 2 s.h.
	nced Tests and Measurements in Physical ation

6. H.E. 526. Curriculum Development in Health Education; or

В.				ses—Health Education Sequence	2	s.h.
	1.	Physi	cal E	ducation 603. Research Seminar in Physical		
		Educ	ation	and Health	2	s.h.
		(Req	uired	of all candidates except those students who enro	II	for
			. 600.			
	2.	H.E.	525.	History and Foundations of Health	2	s.h.
	3.	H.E.	526.	Curriculum Development in Health Education	2	s.h.
	4.	H.E.	411.	School Health Services; or		
		H.E.	527.	Healthful School Living	2	s.h.
	5.	H.E.	528.	The Evaluation of Health	2	s.h.
	6.	H.E.	529.	Seminar in Basic Issues in Health	2	s.h.
C.	Ele	ectives		0	-8	s.h.
	,	The se	electio	n of electives will be determined through advisemen	nt a	and
wi	ll b	e base	d on	the needs and interests of each individual.		

## **GRADUATE COURSES**

#### **Health Education**

## H.E. 500. Health Aspects of Family Living

2 s.h.

Minimum: 32 s.h.

This course deals with problems of growth and development, reproduction, heredity, and social and emotional aspects of sexual development. The role of the family in today's culture and problems of family relations are examined. Prerequisite: A basic course in Health Education.

#### H.E. 501. School Safety

2 s.h.

This course will deal with all aspects of safety relating to the well being of school personnel. Incidence of accidents and their cause, safety hazards, disaster control, and development of a school safety program will be considered.

#### H.E. 525. History and Foundations of Health

2 s.h.

The history of the health movement is traced from 1000 B.C. to the present with special emphasis on certain periods that serve as landmarks in man's progress in health promotion. The unique role of the school as one agency in health promotion is considered in depth. The foundations for programs of health are studied in relation to scientific advancements and prevailing philosophies.

#### H.E. 526. Curriculum Development in Health Education

2 s.h.

The purpose of this course is to provide the student with opportunities to improve his skills and techniques in curriculum construction. The framework of the curriculum and criteria for selection of curricular experiences will be undertaken. A review and analysis of appropriate teaching methods, materials, and evaluation procedures will also be considered. Prerequisite: A methods course in Health Education.

## H.E. 527. Healthful School Living

2 s.h.

School environment, organization of the school day, and the inter-personal relationships favorable to emotional, social and physical health are examined in this course. Standards for building construction and policies are studied as they relate to the school environment. The policies and procedures of schools that contribute to the emotional health of students are considered. Prerequisite: A basic course in Health Education.

#### H.E. 528. The Evaluation of Health

2 s.h.

The procedures useful in determining the effectiveness of the school health program and its several phases are considered. The purposes of evaluation, devices available, and administrative problems are discussed. The development and

interpretation of evaluation devices are an important part of the course. Prerequisite: A methods course in Health Education.

#### H.E. 529. Seminar in Basic Issues in Health

2 s.h.

This course is designed to survey current trends in the organization, administration, and teaching methods of health education. The content of the course will be based on the developed objectives evolved by the students and teacher in light of their experiences. Prerequisite: A methods course in Health Education.

## **Physical Education**

## P.E. 550. Survey of the Literature and Trends in Physical Education 2 s.h.

Students will be required to survey comprehensively books, periodicals, and other teaching materials in the field of physical education. They will also identify the outstanding authors and be familiar with their basic philosophies.

## P.E. 551. Philosophy of Recreation in School and Community 2 s.h.

Presents a survey of the development of recreational philosophies and a study and evaluation of the modern philosophy in America. The organization of recreation in school and community, the importance of leadership, social and cultural implications, economic, governmental, and leisure time influences, and a study of current practices will be undertaken.

#### P.E. 552. Seminar in Current Problems in Men's Athletics

The organization and administration of intramural and inter-scholastic athletic programs will be considered in this course. Current practices related to crowd control, scheduling, promotion of the program, personnel, and other persistent problems identified by the students will be discussed. Trends in such areas as sports medicine, coaching, and officiating will also be considered.

## P.E. 553. The Development and Conduct of Extra Curricular Physical Education for Girls 2 s.h.

Cultural, educational, economic and physical aspects in the selection of appropriate activities will be considered. Objectives in relation to desired outcomes will be established on the basis of group needs. Types of program organization and planning will be discussed, motivation, publicity and awards will be considered, programs in operation will be examined, and literature and research projects will be reviewed.

#### P.E. 554. Orientation in Sports Medicine

2 s.h.

2 s.h.

New techniques, materials, modalities, and problems related to the prevention and care of athletic injuries will be covered. Appropriate current developments in the field of sports medicine will be discussed and studied along with new concepts and activities for conditioning for both the athlete and non-athlete. Prerequisite: Courses in the Prevention and Care of Athletic Injuries, Kinesiology, and Physiology of Exercise.

## P.E. 555. Scientific Analysis of Sport and Physical Education Skills 2 s.h.

This course is concerned with the principles of efficient movement as determined through research in allied fields. A study of mechanical and physiological principles will be undertaken to emphasize their importance in accelerating and improving motor learning as well as efficient body movement. Laboratory exercises, projects, and demonstrations will be the primary methods involved.

## P.E. 575. Foundations and Interpretation of Physical Education 2 s.h.

A brief review of the history of physical education with emphasis on the development of physical education in the United States. Exploration of modern

theories and philosophies of physical education in the United States and in foreign countries. A study of the scientific basis and foundations of physical activity and their relation to performance and fitness. Prerequisite: A course covering the history and principles of Physical Education.

## P.E. 576. Curriculum Development in Physical Education 2 s.h.

A study of the selection of appropriate physical education activities for elementary and high school programs based on principles of growth and development and psychological and sociological needs. Current trends and practices will be investigated and evaluated. Opportunities will be made available for working in the student's particular area of interest, and to identify the relationship of physical education programs at all levels, and of physical education to other areas of instruction in the school curriculum. Prerequisite: Methods course in elementary and secondary physical education. (Formerly P.E. 450.)

#### P.E. 577. Administration and Supervision in Physical Education 2 s.h.

This course will concern itself with the role of the teacher and administrator in supervision in physical education. Techniques of interviews, visitation, conference and others will be studied in reference to their use with student teachers, beginning teachers, and experienced teachers. Supervision of both physical education and classroom teachers will be considered. Prerequisite: Three years of teaching experience.

## P.E. 578. Physical Education for Exceptional Children

2 s.h.

An advanced course in the adaptation of physical education for the exceptional child. The aims, objectives, principles and underlying philosophy will be reviewed. The administration, organization and development of such programs in the schools will be discussed at length. Current trends will also be evaluated. Prerequisite: An undergraduate course in adapted or corrective physical education.

#### P.E. 579. Advanced Tests and Measurements in Physical Education 2 s.h.

A survey will be made of the development of new tests and techniques for determining levels of skill, status in growth and development, and for the various qualities which contribute to total physical fitness. Advanced techniques for processing data also will be considered. Prerequisite: A course in educational statistics.

#### P.E. 603. Research Seminar in Physical Education and Health 2 s.h.

The purpose of this course is to examine the principles upon which research is based in physical education and health and to familiarize students with important studies, programs, personnel and techniques employed in research in this area. Each student will be required to complete a research project which must be presented to the physical education faculty for approval. Prerequisite: Educ. 503.

#### SENIOR-GRADUATE COURSES

#### **Health Education**

#### H.E. 408. Driver Education

3 s.h.

A basic course for the certification of Driver Education teachers. The course consists of a minimum of 40 hours of class recitation and/or discussion and 20 hours of practical experience. Prerequisite: Driver's license and three years of satisfactory driving experience.

NOTE: Students must be recommended by their high school principal and have an interview with the instructor before registration. This course should not be selected as a health education elective.

#### H.E. 411. School Health Services

2 s.h.

The student is familiarized with the health services in the school. The part the teacher plays in coordinating activities with the medical staff is emphasized. Prerequisite: A basic course in Health Education.

#### H.E. 412. Alcohol Education Workshop

2 s.h.

This is a workshop course offered with the cooperation of the State Department of Health and aimed at preparing teachers and other school personnel for more understanding service in this special area of education. The workshop covers the physiological, sociological, and psychological problems involved in the use of beverage alcohol and on the materials, sources, and techniques found to be most useful in alcohol-education programs.

#### H.E. 415. Community Health

2 s.h.

A study of the health needs of a community in relation to water supply, air purification, sewage and garbage disposal, food standards, housing, disease and pest control, and other related areas, Health problems are considered in the light of public health services and attention given to protective as well as corrective measures. The course is conducted through field trips, surveys, lectures, and the use of audio-visual aids. (Formerly Community Hygiene). Prerequisite: A basic course in Health Education.

## **Physical Education**

## P.E. 410. Water Safety and First Aid

2 s.h.

This course includes intensive instruction in swimming, diving, water sports, boating, canoeing, water safety, and first aid. Students can qualify for Red Cross certificates during this course.

#### P.E. 415. Movement Techniques and Rhythmic Accompaniment

This course is designed to develop skill and understanding of body movement techniques and the rhythmic accompaniment of such techniques. Lectures, reading assignments, demonstrations, and participation will be utilized to relate anatomical structure and function to these movement techniques and to develop teaching skill.

#### P.E. 420. Dance As An Art Form

2 s.h.

Experimentation in the use of time, space, and energy as applied to the dance medium. An exploration of modern dance as an art form with opportunity provided for individual and group choreography. Prerequisite: A course in Modern Dance.

## General Education Courses in Health and Physical Education

The following courses may be chosen by matriculated students (other than H. E. and P. E. majors) to meet the requirements in General Education outside their specific area of specialization:

H.E. 500. Health Aspects of Family Living, H.E. 501. School Safety, H.E. 527. Healthful School Living, P.E. 551. Philosophy of Recreation in School and Community, H.E. 411. School Health Services, H.E. 412. Alcohol Education Workshop, H.E. 415. Community Health, P.E. 410. Water Safety and First Aid, P.E. 420. Dance as an Art Form.

# DEPARTMENT OF INDUSTRIAL ARTS EDUCATION

Graduate Advisor: DR. CARL E. FRANKSON

Graduate work in the Department of Industrial Arts Education is designed to help teachers of industrial arts (1) to become more proficient in teaching through study of recent trends and new developments in the field, (2) to improve organization of the industrial arts laboratory, and (3) to provide a basis for work in supervision and administration. Advanced work in industrial arts and related areas which will meet needs and broaden professional experiences of industrial arts teachers is emphasized.

Individuals who have an undergraduate major in this area, but who do not wish to work toward a degree, may enroll in graduate courses in the department

with the consent of the advisor.

## REQUIREMENTS FOR THE M.A. DEGREE IN INDUSTRIAL ARTS

I.	Genera	l Education (see Master's Degree Program Pattern)	6-12	s.h.
II.	Basic P	rofessional Education (see Master's Degree Program Pattern)	6-9	s.h.
III.	Special	ization	11-20	s.h.
	Require	ed Courses	9	s.h.
	501.	Curriculum Content and Course Organization	3	s.h.
		Shop Planning and Equipment Selection		
	603. I	Research Seminar in Industrial Arts	3	s.h.
	Elective	25	2-11	s.h.

Remaining industrial arts courses will be selected from the following offerings, subject to the approval of the graduate advisor. Students must balance laboratory courses with lecture-seminar courses based on needs and interests of each individual.

Laboratory

-	11.	muusutat	I Hotogi	apme	recm	nques	*******		**********		0	2.11.
4	32.	Power Te	chnolog	y							3	s.h.
4	31.	Advanced	Electro	nics					***********		3	s.h.
4	22.	Industrial	Plastics	Techr	niques				***********		3	s.h.
S	emin	ar Courses			-							
5	08.	Historical	and Co	ntemp	orary	Industr	rial A	Arts.	Literatu	re	3	s.h.
		Supervisio										s h

Graduate Thesis 4 s.h

Subject to approval by the graduate advisor and the departmental committee.

Minimum: 32 s.h.

#### **GRADUATE COURSES**

#### Ind. Arts 501. Curriculum Content and Course Organization

3 s.h.

Curriculum construction techniques used in developing a program of industrial arts are studied. Special emphasis is placed on the development of industrial arts courses and instructional materials.

#### Ind. Arts 502. Shop Planning and Equipment Selection

411 Industrial Photographic Techniques

3 s.h.

Principles of planning and equipment selection for modern industrial arts laboratories are stressed. The practical application includes architectural aspects,

floor plan layouts, equipment selection, bid preparations, and construction of scaled laboratory models.

## Ind. Arts 508. Historical and Contemporary Industrial Arts Literature 3 s.h.

Published material related to industrial arts is surveyed to determine its applicability to laboratory teaching and professional improvement. This includes historical writings on the development of industry and industrial education, research literature in the field, published materials provided by corporations and government agencies, and pertinent reference works, handbooks, and periodicals.

#### Ind. Arts 511. Supervision of Industrial Arts

3 s.h.

Principles and practices of supervision, as related to the modern industrial arts laboratory are discussed and evaluated. Special attention is given to supervisory techniques, budget supplies, inventories, maintenance, safety, and upgrading of in-service teachers.

#### Ind. Arts 601. Independent Study in Industrial Arts

3 s.h.

This course is designed to allow students to pursue study on individual problems under the guidance of a sponsoring faculty member. In addition, credit may be obtained for I.A. 601 upon completion of an approved industrial course related to the student's special area of interest. Registration for this course is by permission of advisor only.

#### Ind. Arts 603. Research Seminar in Industrial Arts

3 s.h.

Two patterns of research are considered in this seminar: (1) Industrial research techniques with materials and processes as they may be adapted to industrial arts programs in public school, (2) Education research techniques as they are applied to problems in industrial arts education. Prerequisite: Educ. 503.

## SENIOR-GRADUATE COURSES

#### Ind. Arts 407. Field Studies of Industry

4 s.h.

A broad range of industrial firms is visited to note and evaluate the processes used, the materials employed, the working conditions instituted, and the labor relations practiced. Every attempt is made to visit representative industries in the metropolitan area.

#### Ind. Arts 411. Industrial Photographic Techniques

3 s.h.

Industrial equipment, materials, and processes are used and evaluated in connection with a variety of experiences in industrial photography. Open to senior or graduate Industrial Arts majors and others meeting prerequisite—I.A. 141 and 142 or approval of instructor.

#### Ind. Arts 412. Design in Industry

3 s.h.

The industrial designer's approach to design dictates the material and activities in this course. Students engage in all the activities involved in the design of a product for production and purchase in contemporary society. Open to senior or graduate Industrial Arts and Fine Arts students.

#### Ind. Arts 421. Jewelry Making and Lapidary

3 s.h.

Through laboratory experiences students have the opportunity to develop lapidary and jewelry making skills. They will design pieces that will involve casting and wrought jewelry processes. The lapidary experiences cultivate skills in sawing, shaping, polishing, and mounting stones to exhibit their inherent qualities.

#### Ind. Arts 422. Industrial Plastics Techniques

3 s.h.

An advanced technical course in the industrial area of plastics. Study is based upon foundation material and concerned with developing technical proficiency and mechanical skill in regard to injection molding, extension molding, compression molding, transfer molding, and laminating. Prerequisite: I.A. 381 or equivalent or permission of instructor.

#### Ind. Arts 431. Advanced Electronics

3 s.h.

An overview of our current electronic technology with emphasis placed upon the applications of electronic circuitry to communications and control systems. Prerequisites for the course are a basic knowledge of A.C. and D.C. circuit theory and a familiarization with power supply, amplifier, and oscillator circuits.

## Ind. Arts 432. Power Technology

3 s.h.

An advanced technical study of internal and external combustion engines and a fluid power. In addition to the study of established engines, power sources in the developmental stage will be examined. Much of the course work will consist of work on individual problems in power. Prerequisite: I.A. 252 or permission of the instructor.

#### Ind. Arts 442. Conservation of Basic Industrial Materials

2 s.h.

Students, while living for ten days at the New Jersey School of Conservation, Stokes State Forest, study the origin, development, use, and consumption of basic materials as they exist in nature, by taking field trips to resources and industries, by employing a variety of instructional aids, and by talking with specialists in each area.

# Ind. Arts 443. The Use and Processing of Basic Industrial Materials by Modern Industry 2 s.

Students live for ten days at the New Jersey State School of Conservation. Study is devoted to recognition, use, and processing of basic natural materials, such as ores, wood, fuels, and agricultural products to improve their value as industrial materials, such as leather and plastics. The course is developed through the use of films, field trips, and discussion with industry specialists.

#### General Education Courses in Industrial Arts

The following courses may be chosen by matriculated students (other than Industrial Arts majors) to meet the requirements in General Education outside their specific area of specialization:

Ind. Arts 407, 412, 421, 422, 433, 461, 462.

## DEPARTMENT OF MATHEMATICS

Graduate Advisor: PROFESSOR PAUL C. CLIFFORD

The graduate courses in mathematics are designed to meet the needs of teachers in service. There is opportunity for further study in pure mathematics, in applied mathematics, and in the teaching and supervision of mathematics. The courses in pure mathematics are designed to extend the student's knowledge of subject matter and to provide him with the background needed for teaching adequately in both traditional and experimental programs at the junior and senior high school levels. The courses in applied mathematics show the applications of mathematics in related areas of the physical, biological, and social sciences. The courses in teaching and supervision give attention to the current problems and proposals in mathematics education, the organization and construction of course syllabi, and administrative problems.

#### REQUIREMENTS FOR MATRICULATION

A candidate for the Master of Arts Degree in Mathematics should consult the Graduate Advisor of the Mathematics Department before matriculation since the choice of graduate courses should be adjusted to the preparation acquired in undergraduate work. The student's work program, for a minimum of thirty-two semester-hours of work, is prepared in consultation with the Graduate Advisor. Any changes in the work program are made only with the written approval of that advisor.

The candidate for the M.A. degree must present an undergraduate major of at least twenty-four semester-hours of mathematics. Any deficiencies must be made up prior to conferment of the degree. This must be done in courses approved by the Graduate Advisor.

The candidate for the M.A. degree must satisfy the general admission and matriculation requirements of the College as set forth in the Graduate Bulletin.

#### REQUIREMENTS FOR THE M.A. IN MATHEMATICS

I.	General Education (see Master's Degree Program Pattern)	5-12	s.h.
П.	Basic Professional Education (see Master's Degree Program Pattern)	6-9	s.h.
III.	Specialization:	l-20	s.h.
	Each candidate must take at least one course in each of the following	sets	:
	Math. 503 and 504	2	s.h.
	Math. 532 and 533	2	s.h.
	Math. 523 and 524	2	s.h.
	Math. 407, 518 and 519	2	s.h.
	Math. 501, 506 and 529	2	s.h.
	Math. 640	2	s.h.
	Electives (after consultation with Graduate Advisor)	0-8	s.h.
TV	Departmental Framination		

IV. Departmental Examination

A final examination in mathematics is given all candidates prior to the conferment of the degree. This examination is general in nature and is designed to test the candidate's maturity of thought in mathematics and mathematics education.

Minimum: 32 s.h.

#### **GRADUATE COURSES**

## Math. 501. Administration and Supervision of Mathematics

2 s.h.

This course is concerned with the problems met in organizing and supervising the teaching of mathematics. The topics considered are the functions and qualifications of the supervisor of mathematics, in-service training of teachers, demonstration lessons, professional attitude and preparation of teachers, department meetings, selection of texts, current problems, research; and the basis for determining objectives.

#### Math. 503. Foundations of Algebra

2 s.h.

Careful consideration is given to the fundamental concepts and postulates which form the foundations of algebra. The modern algebraic theories of groups, rings, and number fields are introduced. The development of our number system and the general theory and use of polynomial functions are considered.

#### Math. 504. Modern Algebra

2 s.h.

Vectors and vector spaces are introduced as generalizations of numbers and number systems. Particular attention is also given to matrices, determinants, and linear dependence. Applications are considered. Prerequisite: Math. 503.

#### Math. 506. Principles of Teaching Secondary School Mathematics 2 s.h.

The primary purpose of this course is to relate recent psychological research into the learning process to the presentation of specific areas of secondary-school mathematics. Among the topics considered are: motivation, concept formation, drill, transfer of training, problem solving, and provisions for individual differences.

## Math. 507. Teaching of General Mathematics

2 s.h.

This course is concerned with mathematics programs for the non-college-bound high school student. Reports and recommendations from curriculum studies are examined. Among the topics considered are: basic characteristics and needs of non-academic students, preparation and use of resource materials, classroom teaching techniques, and methods of motivation. Emphasis is given to the development of suitable curricula for non-academic students.

#### Math. 512. Numerical Analysis

2 s.h.

This course deals with the determination of functions from observed experimental data. Among the topics considered are: finite differences, symbolic operators, differencing, interpolation formulae, the method of least squares, and harmonic analysis. The course is designed to show the nature of mathematics as an applied science.

#### Math. 513. Computer Programming

2 s.h.

This course is concerned with the use of a computer to solve problems, including some from secondary school mathematics. Problem solving methods suitable for a stored-program computer and programming languages are considered. Prerequisite: Math. 512 or permission of the instructor.

#### Math. 517. Set Theory

2 s.h.

This course develops the groundwork on which most of modern mathematics depends. Topics include: historical development, classical paradoxes, relations, mappings, equivalence, ordered sets, choice functions, Zorn's lemma, transfinite cardinal and ordinal algebras.

#### Math. 518. Theory of Functions of Real Variables

2 s.h.

The fundamental properties of real numbers and the elementary properties of functions of real variables are systematically developed. Among the topics considered are: continuity, differentiability, integrability, algebraic and transcendental functions, hyperbolic functions, and infinite series. Prerequisite: Math 407.

#### Math. 519. Theory of Functions of Complex Variables

2 s.h.

The fundamental properties of complex numbers and the elementary properties of functions of complex variables are developed. These include the properties of mappings, line integrals, Cauchy-Goursat Theorem, and conformal mapping.

The practical applications of the theory are stressed by the use of illustrative examples. Prerequisite: Math. 407 or permission of the instructor.

#### Math. 523. Theory of Probability

2 s.h.

This course develops probability theory as a mathematical model describing random phenomena. Topics include: basic probability theory for finite sample spaces, random variables and functions of random variables, particular probability distributions, certain limit theorem, sequences of random variables and Markov processes. While the emphasis is on mathematical proof, a variety of applications in both the physical and the social sciences are developed. Prerequisite: Math 307 or 422.

#### Math. 524. Statistical Inference and Sampling Theory

2 s.h.

This course is concerned with making inferences from sample data and with evaluating risks connected with these procedures. Topics include: sampling distributions, point and interval estimation, tests of hypotheses, regression and correlation, elements of analysis of variance and nonparametric statistics. Prerequisite: Math. 523.

#### Math. 529. Curriculum Construction in Mathematics

2 s.h.

This course is concerned with the implications and classroom implementation of contemporary recommendations for college preparatory curriculums in secondary school mathematics. The work of major curriculum groups is explored in detail, together with an examination of the mathematical concepts underlying these programs.

#### Math. 530. Mathematics Materials for the Teacher of Mathematics 2 s.h

This course is concerned with the adaptation and use of materials to motivate and improve the teaching of high school mathematics. Particular attention is given to the equipment needed for a modern mathematics laboratory; to the effective use of such audio-visual equipment as the overhead projector; to the use of mathematical films and film-strips; to the construction and use of mathematical models; and to books, periodicals, and pamphlets needed for the school and for the teacher's library. Material available for individual and club activities in mathematics is considered.

#### Math. 532. Projective Geometry

2 s.h.

The methods of synthetic and analytic projective geometry are compared and used to emphasize the fundamental concepts of Euclidean geometry. Emphasis is placed upon the dependence of many common properties and theorems of Euclidean geometry and upon the properties of lines, parallelism, perpendicularity, similarity of figures, and the definition of distance. Prerequisite: Math. 412 or permission of the instructor.

#### Math. 533. Non-Euclidean Geometry

2 s.h.

The development of hyperbolic non-Euclidean and of elliptic non-Euclidean geometry is carefully traced. A brief survey of the historical development of each is given. This course is designed for teachers and students of mathematics who desire a better perspective of the field of geometry. Prerequisite: Math. 412 or permission of the instructor.

#### Math. 551. Mathematics of Social Sciences

2 s.h.

This course surveys the mathematics of economics, business, sociology, and psychology. The discussion includes such topics as: theory of investments, distribution of wealth and income, use of charts and graphs, business trends, and measurement and presentation of data in social sciences.

## Math. 552. Applied Mathematics

2 s.h.

This course consists of a review of the fundamental ideas of mathematical analysis including analytic geometry and calculus as they apply to the solution of problems in physical science. Vectors are introduced and applied to the solution of problems in physics. The mathematical content of the modern science curriculum is considered at appropriate areas of the course.

#### Math. 553. Applied Mathematics

2 s.h.

This course is an extension of Mathematics 552. The differential equations of science are considered along with techniques of harmonic analysis. Prerequisite: Math. 552.

## Math. 602A, 602B, 602C. Workshop on Secondary School Mathematics

2 s.h. each

These courses are conducted as workshops to provide teachers with increasing insight into contemporary mathematics. The emphasis is upon mathematical principles and concepts. Topics are selected for their significance in revisions of secondary school mathematics programs. Areas covered include those necessary to develop competence in teaching contemporary courses in high school algebra and geometry, as well as the senior year program in high school mathematics.

## Math. 603A, 603B, 603C. Workshop on Junior High School Mathematics

2 s.h. each

These courses provide the necessary mathematical background to understand and interpret current curriculum recommendations in the junior high school. Areas covered include: structure of the number system, mathematical systems, probability, foundations of algebra, and foundations of geometry, each of which is oriented for junior high school teachers.

#### Math. 640. Research Seminar in Mathematics

2 s.h.

This course will be taken to satisfy the two semester-hour research requirement, Prerequisite: Educ. 503.

#### SENIOR-GRADUATE COURSES

#### Math. 405. History of Mathematics

2 s.h.

This course surveys the history of elementary mathematics, through calculus, from ancient times to the present. Emphasis on the major developments in the fields of arithmetic, algebra, and geometry, and on contributions of leading mathematicians. The solution of mathematical problems in their historical context is an important part of the course. A by-product is the motivation effect of historical information on the teaching and learning of mathematics.

#### Math. 407. Advanced Calculus I

3 s.h.

This course develops the calculus of a function of one variable as a mathematical system. On the basis of postulates for the real numbers, the concepts of function, limit, sequence, infinite series, power series, continuity, uniform continuity, differentiation, and integration will be rigorously developed. Topics considered include: Archimedean principle, density of the rationals, intermediate value theorem, Heine-Borel theorem, mean value theorem, Cauchy convergence criterion, existence theorems, and uniform convergence theorems.

#### Math. 408. Advanced Calculus II

3 s.h.

This course presents a rigorous treatment of the calculus of functions of several variables, together with the development of the theory of Fourier series. Topics include: Green's theorem, Stoke's theorem, divergence theorem, implicit

function theorem, inverse function theorem, Riemann-Lebesgue lemma and Cesaro convergence.

#### Math. 409. Elements of Finite Mathematics

2 s.h.

Topics considered in this course are those dealing with finite, rather than infinite sets. Included are such topics as: sentences and statements, truth tables, sets, Boolean algebra, and linear programming. Applications of mathematical techniques in the social sciences are stressed throughout the course.

#### Math. 410. Mathematics of Finance

2 s.h.

This course introduces the elementary theory of simple and compound interest and leads to the solution of practical problems in annuities, sinking funds, amortization, depreciation, stocks and bonds, installment buying, and savings and loan associations. It discusses the mathematics of life insurance covering the following: the theory of probability as related to life insurance; the theory and calculation of mortality tables; various types of life annuities and insurance policies and reserves. This course gives a helpful background to the mathematics teacher and aids the student of economics and insurance.

#### Math. 411. Elements of Mathematical Thought

2 s.h.

This course acquaints students having a limited background in mathematics with the logical structure of mathematics. There is an emphasis on postulational foundations and the reasoning process itself. Topics include: the nature of mathematical knowledge, the origin and influence of logical systems, essentials of logical reasoning, and examples of logical systems from algebra and geometry.

#### Math. 412. Foundations of Geometry

3 s.h.

In this course a study is made of postulates for various geometries. Euclidean geometry is considered as a special case of affine and projective geometries. The course includes a comparison of non-Euclidean geometries.

#### Math. 415. Differential Equations

2 s.h.

Applications of differential equations and their standard methods of solution are treated in this course. Topics are: linear differential equations of the first degree and of the first and higher orders, linear equations of the nth order with constant coefficients, linear equations of the second order, exact and total differential equations, simultaneous equations, numerical approximation, and series solutions.

#### Math. 417. Theory of Numbers

2 s.h.

This course offers a systematic development of classical number theory along with a discussion of the historical background. The treatment employs current set-theoretic notation to make the traditional topics more meaningful. It includes such topics as prime and composite numbers, Euclid's algorithm, congruences, diophantine equations, quadratic residues, and the Euler-Fermat theorems.

#### Math. 422. Introduction to Probability and Statistics

2 ch

This course surveys the major concepts of elementary probability and statistics and serves as an introduction for students who have had no previous work in this field. Topics include: probability theory for finite sample spaces, elements of combinatorial theory, binomial distributions, continuous distributions, functions of random variables, and problems of estimation and tests of significance. Students credited with Math. 307 may not take this course for credit.

## Math. 423. Techniques and Applications of Statistics

2 s.h.

This course is designed as a basic survey of statistical techniques as applied in the social and behavioral sciences. Fundamental concepts and assumptions are

stressed and justified experimentally, although mathematical proof of theorems is strictly limited. Topics include: descriptive statistics, elements of probability, sampling procedures and sampling statistics, tests of hypotheses and simple design of experiments. Students are expected to have an adequate background in high school algebra. This course is offered as a general education elective and may not be taken for credit by mathematics majors.

#### Math. 432. Introduction to Topology

3 s.h.

The aim of this course is to introduce the student to some of the terminology, concepts, and methods of a rich branch of mathematics which has proved to be a fertile area for current research in mathematics. Special emphasis is to be placed on the "topological" structure of the familiar real line (set of real numbers), ordinary Euclidean space, and metric spaces in general. This course is designed to provide a background for both understanding more fully the results of classical analysis (calculus), and for studying "modern" analysis.

#### Math. 440. Contemporary Programs in Secondary Mathematics

2 s.h.

This course is concerned with an exploration of contemporary curricula in secondary mathematics. The recommendations of various curriculum studies are explored and problems of implementation considered. Major attention is given to the programs of grade eleven and twelve. The Advanced Placement program is also considered.

#### Math. 453. Differential Calculus

3 s.h.

Concepts of differential calculus are developed for science students who have taken one year of college mathematics. Topics include: functional relationships, slope, limit, continuity, graphical representations of science problems, differentiation of algebraic and transcendental functions, geometric and physical application of derivatives, velocity, and acceleration in curvilinear motion. Applications are developed utilizing the scientific background of the students. Students credited with Math. 201 may not take this for credit.

#### Math. 454. Integral Calculus

3 s.h.

Concepts of integral calculus are developed for students who have completed Math. 453 or equivalent. Topics include: integration procedures, solid analytic geometry, and geometrical and physical applications of the definite integral in two and three dimensional problems. Applications utilize the scientific background of the students. Students credited with Math. 202 may not take this for credit.

#### Math. 480. Elements of Logic

2 s.h.

This course develops an understanding of methods of reasoning used in the mathematical sciences. The point of view and elementary processes of symbolic logic are studied. Background materials are included for teaching of logical concepts in secondary schools.

#### **General Education Courses in Mathematics**

The following courses may be taken by matriculated students (other than Mathematics majors) to meet the requirements in General Education outside their specific area of specialization. Students should confer with the graduate advisor concerning the mathematical background needed for each course.

Math. 405 History of Mathematics, 409 Elements of Finite Mathematics, 410
Mathematics of Finance, 411 Elements of Mathematical Thought, 422
Introduction to Probability and Statistics, 423 Techniques and Applications of Statistics, 453 Differential Calculus, 454 Integral Calculus, 551 Mathematics of Social Sciences, 552 Applied Mathematics.

## DEPARTMENT OF MUSIC

Graduate Advisor: Dr. WARD MOORE

Graduate study in the Department of Music is designed:

- 1. to offer music teachers in the New Jersey public schools an opportunity to gain further professional preparation for the improvement of their teaching skills.
- 2. to provide an opportunity for students to deepen and enrich their program in general education; to enable them to acquire a more advanced grasp of the problems in professional education; and to move forward in their fields of specialization;
- 3. to encourage the spirit of scientific inquiry and creative, original, and independent thought by providing training and experience in educational research:
- 4. to encourage the teacher to gain the requisite status for professional advancement.

## Admission to the Program

A student with an undergraduate major in music is admitted subject to general College graduate admission requirements as stated elsewhere in this catalog.

## Requirements for the M.A. Degree in Music

- I. General Education (see Master's Degree Program Pattern) 6-12 s.h. II. Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h. III. Specialization Courses 11-20 s.h. A. Required of all Candidates-Music 603—Seminar in Research B. Remainder of specialized courses chosen by student and advisor on basis of need. IV. Comprehensive Examination (See requirements for M.A. Degree
- sub-heading Comprehensive Examination.)
  - V. Thesis Optional (See Thesis.)

#### **GRADUATE STUDY**

## Music Methods

Music 520A.	Problems and Materials of Instrumental Music	2 s.h.
Music 520B.	Problems and Materials of Choral Music	2 s.h.
Music 521A.	Classroom Methods: Piano	2 s.h.
Music 521B.	Classroom Methods: Brass	2 s.h.
Music 521C.	Classroom Methods: Woodwinds	2 s.h.
Music 521D.	Classroom Methods: Strings	2 s.h.
Music 521E.	Classroom Methods: Percussion	2 s.h.
Music 521F.	Classroom Methods: Vocal	2 s.h.

## **History and Literature**

Music 406.	Modern Music		2 s.h.	
Music 407.	Development of	the Opera	2 s.h.	

2 s.h.

Music 413. Masters of the Symphony	s.h.
Music 424. Survey of Wind Instrument Music 2	s.h.
Theory and Harmony	
Music 417. Theory of Sound	s.h. s.h. s.h. s.h.
Skills	
*Music 503A. Applied Music I: Primary Instrument 2  *Music 503B. Applied Music II: Primary Instrument 2  *Music 510A. Applied Music I: Secondary Instrument 1  *Music 510B. Applied Music II: Secondary Instrument 1  Music 530. Advanced Conducting 2	s.h. s.h. s.h.
*See Special Tuition Charges For Applied Music Study	
Research  Graduate 600 Master's Thesis	
Special Tuition Charges For Applied Music Study	5.11.

Instruction in applied music (Mus. 503A, 503B, 510A, 510B) is on an individual basis and a special fee is charged in addition to the regular college fees and tuition. Students registering in a one semester-hour course pay an additional \$75.00 and those in a two semester-hour course, \$150.00 for private instruction.

Before registering in applied music, consult with the Graduate Advisor for

the Music Department.

#### **GRADUATE COURSES**

## Music 503A. Applied Music I: Primary Instrument

Advanced study in a familiar medium for the serious and accomplished student. The course will be adapted to the musical and technical needs of the individual with opportunities available for recital performances. Fifteen one-hour lessons, private instruction. Admission by examination only.

# Music 503B. Applied Music II: Primary Instrument A continuation of Music 503A.

## Music 510A. Applied Music I: Secondary Instrument 1 s.h

An elementary course, both for the beginner and for the student with limited background. Fifteen half-hour lessons per semester, private instruction. Admittance by audition.

# Music 510B. Applied Music II: Secondary Instrument 1 s.h. A continuation of Music 510A.

## Music 511. Aural Theory 2 s.h.

Review of diatonic harmony (figured bass, triads, sevenths and ninth chords

in all inversions, modulation, etc.) through extensive dictation, sight singing, harmonization, analysis, and creative use of materials.

#### Music 512. Advanced Aural Theory

2 s.h.

Chromatic harmony presented as a continuation of Music 511. Altered chords as found in the music of Bach, Beethoven, Brahms, and Tchaikovsky. Included are dictation, sight singing, harmonization, analysis, and creative writing. Prerequisite: Music 511 or equivalent.

## Music 513. Composition

2 s.h.

Practice in the writing of variations, small forms, songs, and music for small ensembles. Analysis and workshop performance are included. Prerequisite: Music 511 or equivalent.

#### Music 516. Advanced Instrumentation

2 s.h.

A workshop course in instrumentation as applied to both orchestra and band. Principles of *Tutti* instrumentation as applied to both media. Scoring for smaller ensembles. Study of instruments, instrumental families and their possibilities and best uses. Direct instrumental setting of school, songs, hymns, etc., without the writing of a score. Elements of band military march construction and scoring. Every student will hear at least one of his instrumentations played by the college orchestra or band. Prerequisite: Music 511 or equivalent.

#### Music 520A. Problems and Materials of Instrumental Music

2 s.h.

This course aims to (1) evaluate teaching experiences, (2) develop an understanding of the problems of the instrumental organization in the school, (3) develop additional knowledge and understandings of the literature for orchestra, band, and a variety of small ensembles at all levels.

#### Music 520B. Problems and Materials of Choral Music

2 s.h.

This course provides a survey of the choral repertoire for accompanied and a cappella groups, for changed, unchanged, changing, and mixed voices. The course includes historical and stylistic characteristics of the choral repertoire. Materials for small groups, as well as large ones, are analyzed for performance value. Criteria for evaluating available materials, program building for all school needs, including holidays, festivals, radio and television performances are an integral part of the course. The members of the class comprise a laboratory chorus for the study of the repertoire.

#### Music 521. Classroom Methods

2 s.h. each

Elementary and secondary classroom methods in the various media; the course deals with the principles, materials, and methods used in teaching class instrumental and vocal music. Especially designed for teachers seeking new ideas in teaching basic principles of the various instruments, including voice.

521A. Piano

521B. Brass Instruments

521C. Woodwind Instruments

521D. Stringed Instruments

521E. Percussion Instruments

521F. Vocal Classes

#### Music 530. Advanced Conducting

2 s.h.

A course in basic conducting practice with emphasis on the practical problems of public school instrumental work. Technique of the baton, clef reading and simple score playing at the piano, transposition, score reading, technique of rehearsal and drilling, conducting of instrumental ensemble accompaniments. Pre-

requisite: A college course in instrumental or vocal conducting or its equivalent in practical experience satisfactory to the instructors.

#### Graduate 600. Master's Thesis

4 s.h.

#### Music 603. Seminar in Music Education

2 s.h.

This course is designated primarily to provide an opportunity for graduate students in music education to investigate and apply the techniques of research in the music education field. Prerequisites: Matriculation for M.A. degree, Educ. 503, or concurrently registered in Educ. 503.

#### SENIOR-GRADUATE COURSES

#### Music 406. Modern Music

2 s.h.

This course is planned to acquaint the student with contemporary music and is a continuation of Music 208. It includes a study of the music of Debussy, Stravinsky, Schoenberg, Berg, Bartok, Hindemith, etc. Students are expected to compose short pieces in contemporary idioms. Prerequisite: a college course in music history or its equivalent satisfactory to the instructor.

#### Music 407. Development of the Opera

2 s.h.

This course deals with the origin, development, and the characteristics of opera in the Italian, French, German, and Russian schools. Class analyses are made of representative operas of these schools. Special attention is given to building an ear repertory of operatic music heard over the radio.

#### Music 413. Masters of the Symphony

2 s.h.

This course helps to provide the student with an understanding and appreciation of the classic and romantic symphony through the study of the symphonies of Haydn, Mozart, Beethoven, Schubert, Schumann, Tchaikovsky, and Brahms. Class analyses, including the reading of scores, are made of representative symphonies.

#### Music 417. Theory of Sound

2 s.h.

The phenomena of sound as related to hearing, to music theory, to musical instruments, to the reproduction of music (phonograph, etc.) and to the conditions under which music is heard.

#### Music 424. A Survey of Wind Instrument Music

2 s.h.

This course includes music for full band, small ensembles, and solos with emphasis on literature available for brass and woodwind players in the elementary and the high school. A laboratory band as well as numerous small ensemble groups are formed by members of the class so that performance of all music under consideration is possible. Special attention is given the music originally composed for wind instruments. New music from all publishers is available for examination and evaluation.

## **General Education Courses in Music**

The following course may be chosen by matriculated students (other than Music majors) to meet the requirements in General Education outside their specific area of specialization:

## Music 413. Masters of the Symphony

2 s.h.

## DEPARTMENT OF SCIENCE

Graduate Advisor: Dr. Joseph F. Becker

The graduate program of the Science Department is designed to help the science teacher with the problem of maintaining his professional competence with respect to recent advances in the fields of science and science education.

Prior to matriculation in the Science Department for the Master of Arts degree the student should complete a subject matter background of at least twenty-four semester hours of college science. This undergraduate program must show breadth in the three areas of science, biology, chemistry, and physics, plus sufficient depth in at least one area to serve as a base for the graduate program to be taken in the major area.

In cases where there is a weak undergraduate program in the major field, prerequisite courses, not for graduate credit, may be assigned. In general, the assignment of elective hours to the major area would compensate for deficiencies in depth of preparation while prerequisite courses would compensate for deficiencies in breadth.

The student's work program is prepared in cooperation with the science advisor. Any changes in the student's work program are made only with the written approval of the science advisor.

#### REQUIREMENTS FOR THE M.A. DEGREE IN SCIENCE

- I. General Education (see Master's Degree Program Pattern) 6-12 s.h.
- II. Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h.
- III. Specialization 11-20 s.h.
  - A. The candidate must complete the research requirement by one of the two procedures listed below:
    - Sci. 505. Research Seminar in Science 2 s.h. Grad. 600. Master's Thesis (see *Thesis*, p. 28) 4 s.h.
  - B. The candidate must complete at least 2 four-semester hour courses from among the following:

Bio. 407, 408, 409, 410, 411, 415, 422, 424, 425, 506, 510, 512, 530, 531, 540.

Chem. 407, 408, 411, 412, 415, 509, 510, 515.

Phy. 402, 405, 406, 409, 410, 411, 416, 417, 512, 515, 520.

Sci. 405, 421, 450, 451-52, 455.

C. The candidate may elect not more than three semester-hours from among the following:

Bio. 501, Chem. 501, Phy. 501.

D. The candidate may elect not more than four semester-hours from among the following:

Bio. 412, 413, 414, 417, 418, 516.

Chem. 413, 414, 511.

Phy. 513.

Sci. 409, 410, 418.

Minimum: 32 s.h.

#### IV. Comprehensive Examination

The comprehensive examination will be based upon the research report in Science 505 or the Master's Thesis.

#### **GRADUATE COURSES IN BIOLOGY**

#### Biology 501. The Teaching of Biology in Secondary Schools

3 s.h.

This is a seminar and research course designed to give opportunity for study of the best methods and practices being used in the teaching of secondary school biology. Major topics of discussion are: aims of secondary school biology, course content, functions of textbooks, testing, laboratory exercises and demonstrations, and the collection and use of suitable and available laboratory materials. A study is made of recent research studies in the field of biology teaching. Prerequisite: 16 s.h. in biology.

#### Biology 506. Histology and Histological Technique

4 s.h.

This course includes a study of the microscopic anatomy of living forms in order to bring about the fuller appreciations of their structure and function. The structural characteristics of cells and their specialization according to function are considered as well as the organization of this basic unit into the tissues and organs of the intact form.

The study of histological preparations during the laboratory period gives the student an opportunity to learn the characteristics of each tissue and organ. Basic procedures for the preparation of tissue sections and permanent mounts are covered. Prerequisite: 8 s.h. in biology.

## Biology 512. General Ecology

4 s.h.

This course considers basic ecological principles and concepts. The habitat approach is followed with appropriate field exercises in fresh water, marine and terrestrial ecology. Intra and interspecific relationships are stressed with all living members of the ecosystem. Practical applications of quantitative and qualitative methods will be stressed. Radioecology will be explored. In every case the role of man in relation to his environment will be central. Each student will choose a problem in either plant or animal ecology and do appropriate research in field and library and report on such activity. Prerequisites: General botany, general zoology, plant taxonomy or equivalent, some physical science.

#### Biology 516. Evolution

2 s.h.

Theories of biological variation, race, and species formation. The development of some of the major animal and plant groups in time and space. Prerequisite: Zoology and/or botany.

#### Biology 520. Plant Physiology

4 s.h.

This course is designed to provide the students with an investigation into the physiology of plants. It will cover in depth those areas of plant growth, development, and reproduction covered generally in the introductory course as well as the new advances in plant physiology. Some of the topics included are water relations of plants, mineral nutrition, physiological significance of soils and soil moisture, photosynthesis, respiration, plant biosynthesis, and dynamics of growth. Prerequisites: Organic chemistry, general botany, or special permission of the instructor.

#### Biology 530. Animal Behavior

4 s.h.

How animals adjust and adapt to stimuli in their external and internal environment, the neuro-muscular and hormonal mechanisms involved, their ontogeny and phylogeny. Prerequisites: A year course in invertebrate and vertebrate zoology and an introductory course in general psychology.

## Biology 531. Comparative Human Anatomy

4 s.h.

A study of man's physical, physiological, and behavioral aspects in the framework, and by the methodological approach of, comparative anatomy. Prerequisite: A year course in general zoology and a course in human anatomy and physiology.

## Biology 540. Parasitology

4 s.h.

This course will consider the structure, life cycles, and ecology of medically important protozoans, helminths, and arthropods. Major emphasis will be placed on the biological relationships between parasite vector and human host. Laboratory work will consist of identification with the use of keys, dissection, examination and preparation of appropriate collections and slides. Prerequisite: General zoology.

#### SENIOR-GRADUATE COURSES IN BIOLOGY

#### Biology 407. Comparative Vertebrate Embryology

4 s.h.

A broad study of developmental anatomy is made with work on fish, amphibian, reptilian, bird and mammalian embryos. The student makes slides of chick embryos.

The modern experimental approach to embryology is reviewed, and implications of a genetic nature are explored. Prerequisite: 8 s.h. of work in zoology.

#### Biology 408. Biological Technique

4 s.h.

The opportunity is given to gain experience in the use of equipment, supplies, and teaching aids so essential to the operation of a successful laboratory and class. Emphasis is also placed upon the collecting and preserving of plant and animal material. The laboratory is devoted to the working out of individual and group experiments and demonstrations. A considerable library of techniques is developed. Prerequisite: 8 s.h. in zoology and 4 s.h. in botany.

#### Biology 409. Human Physiology

4 s.h.

A study is made of both cellular and general aspects of human physiology based upon a previous study of mammalian anatomy and histology. Laboratory sessions closely coincide with concepts discussed during lecture sessions. Prerequisite: A course in vertebrate anatomy or Biology 402.

#### Biology 410. Comparative Anatomy of the Vertebrata

4 s.h.

Representative members of the phylum chordata are studied by means of dissections and demonstrations. The prochordata are considered briefly. Fundamental principles of taxonomy, anatomy, physiology, and ecology are reviewed and amplified. This course should enrich the background of those interested in vertebrate forms and be of value for those interested in man and his place in the world. Prerequisite: 8 s.h. of work in zoology.

#### Biology 411. Bacteriology

4 s.h.

General biological phenomena are demonstrated by microbial life by means of laboratory experimentation with bacteria and other microorganisms. Major topics include: history of microbiology, classification, morphology, metabolism, and ecology. Emphasis is placed upon the economic importance and the relationship of microorganisms to human welfare, health, and disease. Specific laboratory techniques and procedures are developed in the course. Prerequisites: General botany, general zoology, and inorganic and organic chemistry.

#### Biology 412. Genetics

2 s.h.

The basic facts, principles, and theories of variation and heredity as illustrated in microorganisms, higher plants, animals, and man are considered. Modern cytological, embryological, developmental, and statistical approaches are developed. The newer concepts of the gene, mutation, and gene action are considered. Practical exercises are used to illustrate the principles. Prerequisite: Elementary biology of collegiate grade and/or permission of the instructor.

## Biology 413. Economic Botany

2 s.h.

The consideration of the importance of plants and plant life to the world in general and to man in particular is the principal aim of this course. The economic importance of bacteria, fungi, and other lower plants is considered, as well as that of the seed plants.

#### Biology 414. Field Ornithology

2 s.h.

New Jersey is one of the best areas in the East for the study of birds. On the Montclair campus alone, over 130 species have been observed. This course deals primarily with the identification and natural history of birds. A variety of habitats are visited so that one may become acquainted with the habits and requirements of this unusually well-adapted vertebrate type. Migration, methods of attracting and protecting birds, the value of birds, and related topics are also considered. Prerequisite: A year of biology or the equivalent.

## Biology 417, 418. Modern Biology I and II

4 s.h. each

This course meets the needs of in-service teachers who require training in the new approaches to biological knowledge. Cellular biology, biochemistry, evolution and genetics, and the plant and animal community comprise the five general areas to be stressed. Specialists present the data and indicate the implications for man. Visiting lecturers and field trips contribute to the experiences of the students. All participants must be in-service biology teachers in a secondary school.

#### Biology 422. Field Studies of Flowering Plants

4 s.h.

The emphasis of this course is placed upon the methods of identification of higher plants and the ecological factors affecting the growth and development of these plants. Plants in their winter conditions are considered first. As the season progresses, the emphasis changes from the identification of woody to herbaceous forms. Plant communities of various types are observed, and the factors influencing their development are discussed. Field trips are taken to such typical habitats as the Pine Barrens, and Troy Meadows. Prerequisite: General botany.

#### Biology 424. Morphology of Flowering Plants

4 s.h.

This will be an examination of the structure of flowering plants with greatest emphasis being placed upon variation in floral morphology. Adaptations, family relationships, evolutionary development, and some taxonomy will be considered also. Prerequisite: General botany.

#### Biology 425. Elementary Plant Physiology

4 s.h.

This introductory course will consider the major physiological processes of the flowering plant. Topics surveyed in this course include growth, metabolism, photosynthesis, respiration, water relations, and mineral nutrition. Prerequisites: General botany and organic chemistry.

#### GRADUATE COURSES IN CHEMISTRY

## Chemistry 501. The Teaching of Chemistry in Secondary Schools

3 s.h.

A study is made of the objectives, recent trends, methods of presentation, courses of study, lesson planning, instructional aids, and subject matter of high school chemistry. Prerequisite: 16 s.h. in chemistry.

#### Chemistry 509. Advanced Inorganic Chemistry

4 s.h.

This course offers opportunity for intensive and systematic study of the elements in the light of the periodic classification. Selected theories and principles of inorganic chemistry and some of their applications are studied in detail. A study is made of types of compounds. Directed use of chemical literature is an important part of this course. Individual experimental work in the laboratory consists chiefly

of preparation and purification of inorganic compounds and testing for impurities in the products. Prerequisite: General college chemistry.

#### Chemistry 510. Food Inspection and Analysis

4 s.h.

A study is made of the composition of commercial food products, the laws governing purity and marketing of foods, methods of analysis of food. Laboratory work is an extension of chemical and microscopic analysis to provide application of various analytical methods. Methods of extraction; detection of adulterants, preservatives, coloring; estimation of carbohydrates, fats, proteins, minerals, and vitamins are included in the laboratory work of the course. Prerequisites: Organic chemistry and quantitative analysis.

## Chemistry 511. Advanced Biochemistry

2 s.h.

This course is designed to provide a continuum with the course Chemistry 508, Biochemistry. The more recent advances in biochemistry are studied. The course attempts to integrate the concepts of intermediate metabolism. Some of the topics included are: metabolism of biological compounds, electron transport and oxidative phosphorylation, integration of carbohydrate, lipid, and protein metabolism, photosynthesis, the nitrogen cycle, and biochemical genetics. Prerequisites: General college chemistry; organic chemistry; Chemistry 508, biochemistry, or equivalent; or special permission of the instructor.

## Chemistry 515. Advanced Organic Chemistry: Qualitative Organic Analysis 4 s.h.

The primary aim of this course is to acquaint the student with the methods of identification of unknown organic substances. The value, and difference between this and many other laboratory courses, is that as yet no scheme has been devised which reduces the course to the mere following of directions. At every step in the analysis, the student is required to exercise his own judgment. He must rely on his own faculties for observation and originality in planning his work in order to attain a complete and successful characterization of an unknown organic compound. Prerequisite: Organic chemistry.

#### SENIOR-GRADUATE COURSES IN CHEMISTRY

#### Chemistry 407. Advanced Quantitative Analysis

4 s.h.

This course is adapted to the needs of students. The student, after consultation with the instructor, may select analyses from the following: general or special types of oxidation-reduction; gravimetric methods; colormetric methods; use of organic reagents in analyses; electrometric titrations, conductimetric titrations; spectographic methods of analysis; electro-deposition of metals; and special methods of analysis. Prerequisites: General college physics and one semester of quantitative analysis, or permission of the instructor.

#### Chemistry 408A. Industrial Chemistry, Part I

2 s.h.

The purpose is to enable science teachers to understand the type of chemical industries in the State of New Jersey and the nature of their problems. A survey is made by lectures, reports, and trips to plants of the chemical industries. This section of the course stresses the importance and the characteristics of chemical industry, the various unit operations used by the industry to carry out chemical reactions, the controls used to insure quality, the organization for research, and the type of workers employed. Prerequisites: General and organic chemistry, or permission of the instructor.

## Chemistry 408B. Industrial Chemistry, Part II

2 s.h.

This course is a study of the chemical industries of the metropolitan area utilizing the methods outlined in Chemistry 408A. Also, a study is made of the

economics of chemical industry, chemistry, and industry in general, and the effects of chemical discoveries upon living conditions. Prerequisites: General and organic chemistry, or permission of the instructor.

#### Chemistry 411. Physical Chemistry, Part I

4 s.h.

This course, the first half of a year's work in physical chemistry, deals with gases, liquids, crystals, physical properties and electrolytes, colloids, thermo-chemistry, and homogeneous and heterogeneous equilibria. Prerequisites: General college chemistry, analytical chemistry, and general college physics.

#### Chemistry 412. Physical Chemistry, Part II

4 s.h.

This course deals with electrical conductance, electrolytic equilibrium, electromotive force, electroylsis, polarization, chemical kinetics, photochemical reactions, atomic structure, molecular structure, and radioactivity. Prerequisites: General college chemistry, analytical chemistry, and general college physics.

#### Chemistry 413. Atomic Structure and Atomic Energy

2 s.h.

This is a course designed to familiarize the student with a modern conception of the structure of matter and to acquaint him with some significant aspects of atomic energy. Some of the topics: discoveries leading to knowledge of the structure of the atom; isotopes; nuclear fission; nuclear reactions; radio-active isotopes in agricultural, biological, and chemical research; and availability of materials. Prerequisites: General college chemistry and general college physics, or special permission of the instructor.

#### Chemistry 414. Introduction to Radiochemistry

2 s.h.

This course is an introduction to the use of radioisotope experiments for the chemistry curriculum. The course consists of lecture and laboratory work which covers such topics as detection instruments, counting techniques, sample preparation, radiochemical separations by co-precipitation, chelation, and ion-exchange techniques. Prerequisites: General college chemistry, general college physics, or permission of the instructor.

#### Chemistry 415. Biochemistry

4 s.h.

In this course a study is made of the composition of living organisms, their nutritional requirements, their mechanism for promoting and regulating chemical action, and their metabolism of foods. A laboratory study is made of the components of foods, enzyme action, isolation of proteins, etc., blood and urine analysis. Prerequisite: Organic chemistry.

#### GRADUATE COURSES IN PHYSICS

#### Physics 501. The Teaching of Physics in Secondary Schools

3 s.h.

A study is made of the objectives, methods, and techniques of presentation, courses of study, lesson planning, instructional aids, and subject matter of high-school physics. Attention is given to the recent trends in developing apparatus and other equipment suitable for teaching the principles of physics. Assignments are made from recent literature on the outcomes of teaching of physics by television and by other visual aids. Prerequisite: 16 s.h. in physics.

#### Physics 512. Modern Physics

4 s.h.

This course is a survey of recent experimental research in physics and of the newer theories concerning nuclear physics and electricity. Such topics as atomic spectra, radio-activity, artificial transmutation of the elements, and cosmic rays are discussed. Prerequisites: General college physics, general college chemistry, and a course in electrical measurements.

(No credit is given for Phy. 512 if student has taken Phy. 415.)

# Physics 513. Nuclear Radiation

2 s.h.

A study of the nature of radiations is made. Particular attention is given to radiation measurement technique. The course is concluded with a study of health physics as related to radiation dosages and their effects. Some attention is paid to disposal of radioactive wastes, radiation protection, and safety precautions. Prerequisites: General college physics, general college chemistry, and a course in electrical measurements.

#### Physics 515. Fields and Waves

4 s.h.

Intended as a terminal course in physics. Portions of all the undergraduate and graduate courses are utilized to present an overall view of the "state of the art." The philosophy and most advanced research in modern day physics are combined to present a unified view of the physicist's present interpretation of the world about us. Prerequisites: Modern Physics, Introduction to Analytical Mechanics, Nuclear Physics, and a year of Integral and Differential Calculus.

#### Physics 520. Selected Topics in Physics

4 s.h.

This course is designed to acquaint physical science teachers with recent developments in physics. Topics considered will vary. Illustrative examples are: Mossbauer effect, lasers and masers, nuclear and electron resonance, topics fom astro-physics, low and high temperature physics. Laboratory work is not required. Prerequisites: Phy. 101, 102, 402.

#### SENIOR-GRADUATE COURSES IN PHYSICS

#### Physics 402. Magnetism and Electricity

4 s.h.

The purposes of the course are: (1) to provide a background of training in the fundamental laws and principles governing the generation and use of electricity; (2) to develop skill in manipulating laboratory and demonstration apparatus; and (3) to learn the basic principles of alternating current circuits.

Laboratory experiments with modern electrical instruments are employed to verify the Maxwell equations. Some of the topics studied are: modern concepts of the electronic structure of matter, electrical forces, magnetic fields, potential, resistance, impedance, capacitance, and time constants. Prerequisite: General college physics.

#### Physics 405. Light and Optical Instruments

4 s.h.

Topics included for study in the classroom and laboratory are: the propagation of light; emission and absorption of radiant energy; reflection, refraction, polarization; spectrum analysis; photometric measurements; photoelectric cells; measurement of high temperatures; characteristics of illumination, modern illuminants; and industrial and domestic uses of light. Prerequisites: General college physics and a course in electrical measurements.

#### Physics 406. Astronomy

4 s.h.

This course is designed to acquaint the student with the celestial sphere, celestial motions, and the phenomena associated therewith; to make him aware of the principles of astronomy. It consists of a survey of the solar system, practical problems in locating and identifying celestial bodies, a consideration of light and matter, the basic laws of motion, the physical-chemical properties of the sun and stars, stellar scales and maps, the measurement of distance, the cosmology of the universe, the history of astronomical concepts, and the regularities, irregularities, and evolution of the solar system. Prerequisites: General college physics and chemistry.

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# Physics 409. Basic Electronics

4 s.h.

An introductory course in basic electronic phenomena covering such topics as elementary circuit theory, electron emission, vacuum tube and transistor characteristics, non-linear circuit elements, gaseous discharge, and the use of transistors. Applications of electronics to instrumentation, servo-mechanisms, radio, and television are introduced. Prerequisites: General college physics, and a course in magnetism and electricity.

#### Physics 410. Meteorology

4 s.h.

This course develops a fuller appreciation of our atmosphere with emphasis on meteorological applications of physical principles. Consideration is given to weather elements; temperature effects; air currents, air masses, and fronts; the collection, dissemination, and interpretation of weather data; and the general applications of meteorology. The student is expected to learn to use meteorological instrumentation, and emphasis is placed upon the improvisation of apparatus and equipment. Prerequisite: General college physics.

#### Physics 411. Photography

4 s.h.

This course consists of laboratory work and field work supplemented by lectures and demonstrations. Emphasis is placed on physical principles in the construction of cameras, projection printers, tanks and filters. Special attention is given to chemical principles in the development of films and paper, toning, intensification, and reduction. Prerequisites: General college physics and general college chemistry or permission of the instructor.

#### Physics 415. Introduction to Modern Physics

4 s.h.

This course is designed to give the student a general view of the important advances in physics during the past fifty years. In the first part of the course considerable time is spent in the study of electron theory. Some of the topics considered are: the hydrogen atom, optical and X-ray spectra, natural radioactivity, cosmic ray, nuclear fission, new elements and isotopes, and particle accelerators. Some laboratory work is required. Prerequisites: General college physics, general college chemistry, and a course in electrical measurements.

#### Physics 416. Introduction to Analytic Mechanics

4 s.h.

This course includes some treatment of the physics of classical mechanics, of the kinematics of dynamics of particles, and the dynamics of rigid bodies. Mathematical methods of handling data and theory are introduced and developed. The course consists of lectures, discussions, demonstrations of practical application, and problem solving. There are two hours of lecture-recitation and four hours of laboratory work per week. Prerequisite: General college physics. Recommended: 1 year of calculus.

#### Physics 417. Nuclear Physics

4 s.h.

Nuclear Physics is a one-semester course, including laboratory work, which is designed to provide a foundation in the area of nuclear physics for physical science majors and minors. Some topics considered in the course: static properties of nuclei, detectors, nuclear reactions, forces and models. Prerequisites: Phys. 101, 102, 402.

#### **GRADUATE COURSES IN SCIENCE**

#### Science 505. Research Seminar in Science

2 s.h.

This course is designed to afford opportunity for graduate students in science, supervisors, and science teachers: (1) to investigate research in science education; (2) to organize science experiences and science information with the teaching materials for the public schools. Each member of the group selects a

project. This project must be presented to the science faculty and graduate students for evaluation. Prerequisites: Matriculation for M.A. degree in science, concurrent registration Educ. 503, or permission of the instructor.

#### SENIOR-GRADUATE COURSES IN SCIENCE

#### Science 405. Field and Laboratory Studies in Science

4 s.h.

This integrated course is designed to show the relationship in the geological rock formations, the types of soil, water patterns, plant communities, and animal inhabitants in northern New Jersey, and the effects on human occupations. The field trips are for the purpose of gathering data and materials for intensive work in the laboratory. The experiments are designed to give the student acquaintance with the science of common but possibly unstudied features of the landscape; e.g., soils are reproduced in profile and examined microscopically, physically, and chemically; water from a variety of sources is tested for biological and chemical impurities; the census of plant and animal inhabitants of typical areas is associated with relevant factors in the environment. Discussions precede and follow the field and laboratory work to establish the probable history of the area and to suggest the probable trend, whether advancing or retrogressing, of its development. Stress is placed on the kinds of human control in specific communities which would best serve their progress.

Students are asked to submit an analysis of the geological and biological features of some known community, based on the skills and principles learned. Some other objectives of the course include an understanding of the organization of school museums for learning purposes, the making of ecological maps and the illustration of them with photographs and diagrams, and the techniques of ecological field trips. Two instructors, a chemist and a biologist, collaborate in giving this course. Prerequisite: Proficiency in biology and chemistry.

# Science 409. Senior-High-School Physical Science Demonstrations 2 s.h.

This course furnishes teachers of the physical sciences with demonstrations and experiments designed for work in high-school chemistry, physics, and applied physical science courses. A detailed study of demonstrations is made with emphasis on visibility and avoidance of failure. Emphasis is placed on sources of new demonstrations.

# Science 410. Junior-High-School Science Demonstrations 4 s.h.

This course covers the methods of experimental instruction appropriate to grades seven, eight, and nine. A detailed study is made of demonstrations for general science at their levels.

#### Science 411. Problems in Field Studies in Science 2 s.h.

In this course each student selects a phase of field science in which he does advanced research under the guidance of the instructor. Plant ecology, bird-life, pond life, fungi, tree diseases, and insect life are a few of the areas from which the student may choose. Prerequisites: Science 412, Field Studies in Science, or its equivalent, plus at least 12 s.h. of biology.

#### Science 412. Field Studies in Science: Biological 2 s.h.

Extensive instruction in the identification and natural history of fauna and flora is given in this course. Students examine the ecology of plant and animal communities (terrestrial and aquatic) and relate such communities with man's use of natural resources. The relation of field activities to present school curricula is considered. No previous science courses are required.

#### Science 413. Field Studies in Science: Physical

2 s.h.

Emphasis in this course is given to local and New Jersey geology, minerals,

soils, and waters, with emphasis on the chemical and physical aspects of soil and water. Field trips are taken through the Kittatinny Mountains and to the Delaware Water Gap.

#### Science 414. Conservation of Plants and Animals

2 s.h.

The social, economic, and ecological implications of plant and animal conservation are considered together in this course. Discussion periods are interspersed with field trips to forest and wildlife management areas. Cooperating experts from state and federal agencies bring special contributions in their fields. Visual aids are used extensively.

#### Science 415. Conservation of Soil and Water

2 s.h.

The social, economic, and ecological implications of soil and water conservation are considered together in this course. Discussion periods are interspersed with field trips to selected areas. Outside experts bring special contributions in their fields. Visual aids are used extensively.

# Science 418. Three Centuries of Science Progress

2 s.h.

This course includes a study of fundamental world changes that have resulted in the past three hundred years from scientific discoveries. Topics considered are the following: a background of the beliefs and practices of the age; the processes of thought which produced skepticism; the experiments devised to disprove ruling opinions; the new concepts arising from fresh evidence; and the social, economic, and philosophic adjustments following the discoveries.

Stress is given to the nature of scientific inquiry, its cumulative nature, its desire for freedom, and how to judge the probable fruitfulness of a research problem. The role the man of science occupies in the world today is contrasted with his counterpart in earlier centuries. Demonstrations of historical experiments, readings in the original literature, and discussions are employed.

#### Science 419. Field Science and Conservation

2 s.h.

In this course students study phases of field science which are related to conservation. The components of soil and water which produce good crops are studied. Students gain an understanding of farm practices by visiting several nearby farms. Forest and wood-lot management, wildlife preservation, mineral resources use, and other important areas in which science influences the conservation of natural resources are investigated.

#### Science 420. Water Supply and Conservation Problems

2 s.h.

This course is designed to provide students with an opportunity to do an extensive study of the water supply problems in New Jersey and surrounding states. A study of water tables, rainfall, irrigation, drainage, flooding, watershed management, stream pollution, and soil erosion gives students a background for understanding the problems involved in domestic and industrial use of water. State and regional water conservation projects such as Incodel, Passaic Valley Flood Control, and Stony Brook Water-shed are studied. Teaching materials are supplied, and methods of presenting this material to elementary and secondary pupils are demonstrated and discussed.

#### Science 422. Consumer Science

2 s.h.

The purpose and organization of this course are to acquaint the consumer with the aspects of science in everyday life. Basic scientific principles are developed in the process of testing and evaluating consumer products. Field trips are taken to local industries and public utilities to evaluate processes as well as products. A laboratory testing program deals with commercial products from household appliances to foodstuffs and fertilizers. A testing and instructional program is also developed with a local industry. The course is included as a general edu-

cation offering at the graduate level and is not intended as a course for majors in this department.

# Science 450. Paleontology

4 s.h.

A study of the classification, relationships, and evolutionary history of fossils. Study is made of the fossils in the relationship to their ecological environment. Prerequisite: Geology

# Science 451, 452. Oceanography and Limnology I and II 2 s.h. each

A study of the principles and techniques used in the study of both fresh and salt water bodies. Both physical and biological processes within the water bodies are considered. Field work will be done on local bodies of water. Prerequisites: Geology, general chemistry.

#### Science 455. Mineralogy

4 s.h.

An introduction to the study of minerals; their morphology, internal structure, origin, occurrence, and properties. Study will be made of the mineral resources of the New Jersey area. Prerequisites: Geology, general chemistry.

#### **General Education Courses in Science**

The following courses may be chosen by matriculated students (other than Science majors) to meet the requirements in General Education outside their specific area of specialization:

# Bio. 413. Economic Botany, Sci. 418. Three Centuries of Science Progress, Sci. 422. Consumer Science.

Substitutions may be made on recommendation of the Science Department from the list of courses offered by the department.

# DEPARTMENT OF SOCIAL STUDIES

Graduate Advisor: DR. BERTHA QUINTANA

The teacher of social studies works in a field the boundaries of which are constantly changing and expanding. The necessity for constant study, especially with regard to the contemporary social situation and its problems, presses upon every secondary school teacher of the social studies. The Social Studies Department at Montclair intends to provide for such teachers courses of an advanced character which will help to keep them abreast of the changes in a changing society and a complex world. It also provides advanced courses for those teachers who wish to increase their preparedness in specialized secondary school subjects. Finally, it aims to provide for the teacher-in-service an opportunity for keeping informed concerning the changing techniques and problems of teaching the social studies. Selections from advanced courses of the sort just described lead to the Master's degree in the social studies.

#### REQUIREMENTS FOR M.A. DEGREE IN SOCIAL STUDIES

In addition to the general requirements for admission to the graduate program at Montclair, a candidate for the degree of Master of Arts in Social Studies must present an undergraduate major in social studies of at least twenty-four semester hours.

- I. General Education (see Master's Degree Program Pattern) 6-12 s.h.
- II. Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h.
  III. Specialization
  11-20 s.h.
  - A. To increase the candidate's competence as a teacher, each student will take a minimum of eleven and a maximum of twenty semester hours in courses offered by the Social Studies Department. It is recommended that students develop a concentration by electing at least half of their specialization requirement in one of the following areas of study associated with the social studies:
    - 1. American History
    - 2. European History
    - 3. Anthropology
    - 4. Economics
    - 5. Geography
    - 6. Political Science
    - 7. Sociology
    - 8. Non-Western Culture
    - 9. Curriculum

At times two or more of these areas may be combined to make up such a concentration. The balance of the student's program will be made up of electives in other areas and related major fields.

# B. Research Requirement

- One course in each of the areas of concentration will be required
  of those electing to do their research project in that area. This course
  will emphasize the research methodology peculiar to its specific fields
  of inquiry.
- In addition to the research course (Educ. 503) required of candidates in all departments, those majoring in Social Studies will take Social Studies 603: Seminar in Social Studies Research.

# C. Comprehensive Examination

All candidates will take part in a final integrative experience consisting of a three hour written examination structured to cover:

- 1. Subject of research project
- 2. Selected area of concentration
- 3. Current trends in social education

Minimum: 32 s.h.

#### **GRADUATE COURSES IN SOCIAL STUDIES**

# Social Studies 501. Modern Social Studies Instruction and Supervision 2 s.h.

This course is designed to assist teachers, administrators, and supervisors to obtain a comprehensive view of recent curriculum trends in social studies. While primary emphasis will be on development in the secondary school, this aspect will be considered in relation to the total K through 12 program. Consideration will also be given to the problems of administration and supervision as they relate to the pupil, teacher, administrator, and supervisor.

# Social Studies 502. New Materials for the Social Studies 2 s.h.

A study of the sources, selection and evaluation of new materials for the improvement of social studies instruction form the major part of this course. Teachers and administrators concerned with the development of effective social studies programs can become acquainted with the very latest material and equipment available.

# Social Studies 511. American Colonial History, 1492-1776 2 s.h.

A study of European colonial activity in the New World with particular emphasis on the areas which now constitute the United States. Political, social, economic, and intellectual developments receive attention.

# Social Studies 512. Origin and Development of the Constitution, 1619-1835 2 s.h.

This course is an intensive study of the origin and framing of the Constitution of the United States. It aims to search out the roots and influences that determined our basic political institutions. The seminar method is employed and attention is given to the techniques of historical research and writing as it applies to the early period in American history.

# Social Studies 513. The American Revolution and the Early Republic, 1763-1828 2 s.h.

Study and analysis of the causes and events of the Revolution, the establishment and growth of domestic institutions under the Constitution, and the development of foreign policy.

# Social Studies 514. The Middle Period in American History, 1828-1876 2 s.h.

A study of the significant events and developments of this period of our history, including attention to Jacksonian democracy, westward expansion, sectionalism, the Civil War, and Reconstruction.

# Social Studies 515. America in Transition, 1865-1917 2 s.h.

A study of the forces which contributed to the development of the modern industrialized America, the changing nature of American society, and the reactions to the changes which took place in the period.

# Social Studies 516. Recent American History, 1914 to the Present 2 s.h.

Main emphasis will be on the continuing reactions to the problems of an industrialized America, and on America's activities and role as a world power. The period studied is from c. 1914 to the present. The seminar method is used

and attention is given to the techniques of historical research and historical writing as it applies to the later period in American history.

#### Social Studies 521. History of Political Thought

2 s.h.

The major theories of representative political philosophers concerning the nature, functions, organization, and sovereignty of the state are studied in this course. Among those discussed are: Plato, Aristotle, Cicero, Thomas Aquinas, Machiavelli, Luther, Calvin, Bodin, Hobbes, Locke, Spinoza, Montesquieu, Rousseau, Hume, Bentham, J. S. Mill, Burke, Hegel, Marx.

#### Social Studies 522. Great Britain and the Commonwealth

2 s.h.

A study is made of the origins, membership, and working institutions of the British Commonwealth of Nations. Special attention is given to problems of the Commonwealth since 1945, in the light of Britain's altered position in international affairs and the development in Europe of regional economic organizations.

#### Social Studies 523. Modern France

2 s.h.

This course studies the development of modern France from 1789 to the present. Emphasis is placed upon political, social, and economic conditions and trends from the Revolution and Napoleon through the Restoration, Second Empire, Third and Fourth Republics to the establishment in 1958 of the Fifth Republic by Charles de Gaulle.

#### Social Studies 524. Contemporary Europe

2 s.h.

The period between the wars (1919-39) is reviewed, and analyses are made of the origins of World War II and the peace settlement of 1945-47. Emphasis is then placed upon developments in the postwar period, including the reconstruction of Germany, the changeover in France from the Fourth to the Fifth Republic, Britain's continuing economic crisis, and problems of the states of eastern Europe. Special consideration is given to the movement for political and economic integration of European states.

#### Social Studies 525. Russia in the Modern World

2 s.h.

Particular attention is devoted to the institutional apparatus of the Soviet system with emphasis given to the special functions performed by such agencies as the press, the schools, and the agricultural collective. The role of the Communist Party and its relation to other political and economic forces within the nation are discussed. In appraising the development of Soviet foreign policy, the emergence of Soviet interests in the Far East, the Middle East, and Africa are considered.

#### Social Studies 531. Living Races

2 s.h.

The physical anthropology of race: human origins; racial revolution; and racial types in the modern world. The facts of race are utilized as the basis for studying race relations in contemporary society, as well as for clarifying misconceptions concerning race and intelligence, race and culture.

#### Social Studies 532. Applied Anthropology

2 s.h.

This course considers the selection and application of anthropological data for dealing with problems of contemporary life. Emphasis is placed on anthropological method, early problems of application, and the relevance today of anthropological knowledge in the professions. Prerequisite: Anthropology 401 or 402. Required for Anthropology concentration.

#### Social Studies 533. Spanish Culture in the U.S. Today

2 s.h.

This course deals with the cultural heritage of Spanish-speaking America.

Utilizing anthropological concepts, problems of adjustment and educational implications are emphasized.

#### Social Studies 534. Anthropology and Education

2 s.h.

An advanced seminar dealing with the relationship of anthropology to education. Group work and guided individual research centering on the use of anthropological data in our schools. Prerequisites: 6 credits in anthropology, or by permission of the instructor.

# Social Studies 541. Foundations of Contemporary Economic Thought 2 s.h.

The objectives of this course are: (1) to study the antecedents of current economic theory; (2) to analyze economics as a cumulative science through examination of the works of the creative economists; (3) to foster an understanding of the uses and limitations of economic theory.

#### Social Studies 542. Economic Stability

2 s.h.

The objectives of this course are: (1) to study the determinants of stability and growth; (2) to analyze policies available to developed and developing nations that deal with instability and stagnation; (3) to foster an understanding of the issues involved in efforts to avoid insecurity and promote economic growth.

#### Social Studies 543. U.S. in the World Economy

2 s.h.

The objectives of this course are: (1) to study the theory and institutions of American foreign trade; (2) to analyze the alternatives available to the American people; (3) to foster an understanding of the problem of American foreign economic policies.

#### Social Studies 544. Government and Business

2 s.h.

The objectives of this course are: (1) to study the evolution of governmental influences on the functioning of the American economy; (2) to analyze the causes and consequences of government regulation and control; (3) to foster an understanding of the relationship between economic analysis and public policies.

#### Social Studies 551. Constitutional Law

2 s.h.

A study of the development of the Constitution and the Supreme Court of the United States illustrated through reference to court opinions as expressed in selected Supreme Court cases. Areas to be included are: the federal system; human rights; executive, judicial and legislative powers; and interstate commerce.

#### Social Studies 552. The President and Congress

2 s.h.

The course concentrates attention on the organization, structure and powers of the national executive and legislative branches of government. Special emphasis will be placed on executive-legislative relationships, the nature and functioning of the legislative process, and the respective role of the President and Congress in the formulation of public policy in a modern democracy.

#### Social Studies 553. The Federal Courts

2 s.h.

This course concentrates attention on the structure of the federal courts and the manner in which they function. Comparisons and contrasts are drawn between the national and state judicial systems and the body of law which they interpret. Special attention is given to the role of the Supreme Court, both as arbiter of federal-state relations and as a restraint on executive and legislative authority. Some of the major decisions of the Supreme Court are examined in tracing the changes in judicial outlook and interpretation.

# Social Studies 554. American Political Thought

2 s.h.

This course deals with contemporary trends and theories as they have emerged from social and economic conditions and as they are founded upon the bases laid down by Hamilton, Madison, Washington, Jefferson, Marshall, Calhoun, Webster, Lincoln, and Wilson.

#### Social Studies 561. Religion in America

2 s.h.

The study of the dynamics of religion in American society. Among the topics considered are contemporary trends in religious thought, religious social action, religious prejudice, and problems of church, state, and school in urban America.

#### Social Studies 562. Theory and Method in Social Work

2 s.h.

Emphasis in this course is placed on the development of social welfare norms, and on the methodology of contemporary social work. Attention is given to the historical development of social welfare concepts and legislation, and to current trends in the field. Required for Sociology concentration.

# Social Studies 563. Social Movements

2 s.h.

A critical analysis of the development of social movements and their effects on social legislation in the Twentieth Century. The dynamics of social movements in complex societies of the world are studied. Prerequisite: 562 or permission of instructor.

#### Social Studies 564. Social Work and Education

2 s.h.

An advanced seminar dealing with the relationship of social work to professional education. The uses of selected techniques and concepts from the field of social work in contemporary education are emphasized. Students are encouraged to familiarize themselves with services offered by community social agencies to schools and educators. Prerequisites: 6 credits in Sociology, or by permission of the instructor.

# Social Studies 601A, 601B, 601C. New Interpretations in History 2 s.h.

Designed for the teacher with a special interest in history, the course examines important reappraisals of the great problems, personalities and periods of either (A) American history, (B) European history, (C) Non-Western history in the light of recent representative examples of historical writing and research.

# Social Studies 602A, 602B. Recent Trends in the Social Sciences 2 s.h.

The teacher with a special interest in the social sciences can utilize this course to examine current trends in the fields of (A) anthropology and sociology, or (B) political science and economics in terms of recent representative examples of professional writing and research.

# Social Studies 603. Social Studies Research Seminar

2 s.h.

This seminar course is designed primarily to provide an opportunity for graduate students in the social sciences to investigate and apply the techniques of research in the social studies field. Prerequisite: Educ. 503.

#### SENIOR-GRADUATE COURSES IN SOCIAL STUDIES

#### Social Studies 491. Studies in American Life-The East

2 s.h.

This course is a regional study of the United States east of the Mississippi River. It covers New England, the Middle Atlantic States, the South, and the Lake States. It deals with the physiographic, economic, historical and cultural patterns of these regions. It emphasizes the regional differences which charac-

terize American unity and diversity. Motion pictures, lectures, maps, mimeographed materials are used.

#### Social Studies 492. Studies in American Life—The West

2 s.h.

This course is a regional study of the United States west of the Mississippi River. It covers the Plains States, the Mountain States, the Southwest, and the Pacific Coastal States. It deals with the physiographic, economic, historical and cultural patterns of these regions. It emphasizes the regional differences which characterize American unity and diversity. Motion pictures, lectures, maps, mimeographed materials, and bibliographies are used.

#### Anthropology 401. Cultural Anthropology

3 s.h.

An introduction to anthropology as a field of knowledge: the background and development of culture; culture theory; the universals of culture, e.g., religion, art, leisure, education; the relationship of anthropology to science and the humanities. (Not open to social studies majors who have completed Anthropology 200.)

#### Anthropology 402. Dynamics of Culture

3 s.h.

Emphasis in this course is placed on the processes involved in cultural development, growth, transmission, perpetuation, and change. Students will be given the opportunity to study the impact today of modern industrial civilization on emerging nations and peoples.

#### Anthropology 403. Cultural Diversity

2 s.h.

The study of primitive and folk cultures as seen in contemporary perspective. The purpose of this course is to increase student awareness of the range and variety of cultures in today's world, and to improve understanding of factors which account for cultural variability.

#### Anthropology 404. Folklore

2 s.h.

The study of verbal and non-verbal folk traditions in nonliterate and literate societies of the world. Types and functions of folklore, and methodologies employed by folklorists will be stressed.

# Anthropology 405. Psychological Anthropology

3 s.h.

Emphasizing transcultural research, this course focuses on the interrelated nature of culture and the acquisition and modification of human behavior. Cross-cultural studies of the life crises form the basis for analyzing the world view and values of selected societies. Units of study are devoted to the cultural origins of deviant behavior, and to the development of creativity in culture.

#### Economics 401. Labor Economics

3 s.h.

The objectives of the course are: (1) to study the evolution of the institutions of the labor market; (2) to analyze the determinants of wage and non-wage aspects of labor-management relations; (3) to foster an understanding of the issues and alternatives in labor economics.

#### **Economics 402. International Economics**

3 s.h.

The objectives of this course are: (1) to study the evolution of institutions of international economics; (2) to transmit the theory of international trade; (3) to foster an understanding of the impact of international trade on national economies; (4) to develop an appreciation of the international aspects of the goals of economic stability and economic growth.

#### Economics 403. Comparative Economic Systems

2 s.h.

The objectives of this course are: (1) to examine the ideological bases of

capitalism, fascism, socialism, and communism; (2) to analyze the functioning of major types of economic systems; (3) to develop an understanding of the relationship between economic theory and economic policy.

# Economics 404. Current Problems in Economics and Government 2 s.h.

Designed to analyze the relationship of economics to government, the causes and results of governmental activity are discussed in the light of their economic significance and bearing on public welfare through a study of certain classical decisions of the Supreme Court involving those cases relating specifically to economic issues.

#### Economics 405. Money and Banking

3 s.h.

Introductory material of money, credit, and monetary standards precedes a more intensive study of the nature and functions of commercial banking. Special attention is given to the Federal Reserve system and its problems in co-ordinating monetary and credit policy with fiscal policy in order to fulfill its current responsibilities.

#### Economics 406. Workshop-Seminar in Economic Education

2 s.h.

This course provides an introduction to economic analysis. Emphasis is placed upon techniques of incorporating economic education in both the secondary and elementary school curricula. Guest speakers provide an exposure to a variety of academic and lay professional points of view. Current materials in the field of economic education are evaluated, including written materials for teachers and students, films, filmstrips, models, charts, and diagrams. Teachers will be expected to conduct and evaluate an actual classroom experience in economic education during the course.

#### Geography 406. Geology

2 s.h.

The earth and its geographic, stratigraphic, and structural development throughout geologic time, the record of the evolution of life is interpreted through a study of rocks and fossils.

#### Geography 407. Advanced Cartography

3 s.h.

The emphasis in this course is on modern methods employed in cartographic laboratories, in government, academic institutions, and commercial organizations. The course is designed for students with a background in cartography gained either as a result of experience or through completion of an introductory college cartography course. Prerequisite: Geography 307 or equivalent.

# Geography 408. Political Geography

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This course deals with the geographic conditions influencing the significant changes in the political divisions of the world. Emphasis is placed on geographic factors influencing racial, religious, commercial, and political adjustment among nations.

# Geography 411. Historical Geography of the United States

3 s.h

For students of history, geography, and related disciplines to become familiar with major principles of historical geography, it emphasizes the geographic factors pertinent to understanding of American history. Time-place relationships ranging from pre-Columbian America to the present are surveyed and analyzed critically. Attention is paid to source materials, to cartography of specific times, and to geographical lore and thought.

# Geography 412. Geography of Africa

3 s.h.

This course includes a topical and regional study of Africa. Emphasis is placed upon the problems of economic adjustment in the tropics. Soils, vegeta-

tion, climate, physiography, natural resources, and other aspects of the physical environment are examined in the light of man's habitation of the continent. Relations between Africa and the rest of the world are analyzed.

# Geography 419. Geography of the Soviet Union

3 s.h.

This course is designed as a regional analysis of the Soviet Union. It examines the physical and human aspects of Soviet geography. Emphasis is placed on economic regions. Relations between the European states and the Soviet Union are discussed, and Russia's place in the world economy is analyzed.

#### Geography 421. Population Problems of the World

2 s.h.

An intensive examination of the factors which influence the present-day distributional pattern of the world's people and the political, economic, and social consequences of this development are considered. Particular attention is placed on man-land relationships as related to population problems of contemporary nations.

#### Geography 422. Geography of the American Indian

3 s.h.

This course is designed to survey the culture of the American Indian from the Ice Age to the Reservation in relation to his geographic environment. It affords an insight into the geography and cultural history of North America prior to the coming of the white man, deals with the problems experienced and created by alien cultures when they meet, and culminates with the Indian problems of the present day. It serves to introduce methods employed in inter-disciplinary attacks upon cultural problems.

#### Geography 424. Geography of New Jersey

2 s.h.

A detailed topical and regional study of New Jersey, physiography, climate, soils, flora, fauna, agriculture, industry, trade, population, and relation with neighboring states are studied. On the basis of the data examined, an attempt is made to delineate the geographic regions of the state. Emphasis is placed on the relationship between New Jersey's people and New Jersey's earth.

#### Geography 426. Historical Geology

3 s.h.

This course is designed to aid the prospective teacher in acquiring an understanding of the systematic evolution of the present landscape, from the local area to the entire North American continent. Other purposes are to establish the concepts of vast periods of time, of the development of life, of great mountain-making movements, and of the return of all to the sea.

#### History 411. Intellectual History of the United States

3 s.h.

Analyzes the development and contributions of the thought of individuals and groups, dominant and minority, and their effect upon the American mind and upon American traditions and practices.

#### History 412. The Literature of American History

2 s.l

Location, analysis, and use of the available source materials of American history and of the outstanding historical writings from the colonial period to the present.

#### History 413. The West in American History

3 s.h.

A study of the exploration, settlement and development of the regions beyond the Mississippi river. The different types of frontiers are considered. Special attention is focused on the influences of the frontier in American Life.

#### History 414. The South in American History

3 s.h.

This course deals with the development of the South from the earliest settlements to the present. Special consideration is given to those aspects of

Southern life that have been distinctive and represent a special contribution to American Life.

# History 415. History of Canada

3 s.h.

This is a political, economic, and social survey of Canadian development which traces the growth of British North America towards an autonomous status within the British Commonwealth. Special emphasis is placed on Canada's relationship with the United States.

# History 416. History of Latin America

3 s.h.

This course deals with Latin America from the pre-Columbian era to the end of the wars of independence. Stress is placed upon the geographical background and the development of the Maya, Inca, and Aztec civilizations. After considering the Spanish and Portuguese backgrounds of the Latin-American people, consideration is given to the European cultures established in the New World. In dealing with the wars of independence in Latin-America, comparisons are made with the American Revolution.

#### History 421. Renaissance and Reformation

3 s.h.

A study of political, economic, social, religious, and general cultural developments in Europe from about 1400 to 1600. Basic interpretations of the Renaissance and Reformation are examined and discussed.

# History 422. Age of Reason

3 s.h.

A study of Seventeenth and Eighteenth Century Europe, with emphasis on the important intellectual currents of the period. Trends and conditions in France and England are emphasized. Selected readings are done in the works of representative figures of the period: Bacon, Descartes, Locke, Rousseau, Montesquieu, Voltaire, Hume, Adam Smith, and others.

#### History 423. Russia Since 1917

2 s.h.

An analysis of Russia's relations with China, Iran, Turkey, the European continent, England, and the United States is presented. Marxist world policy, as interpreted by Kautsky, Plekhanov, Jaures, Bukharin, Trotsky, Lenin, Stalin, and others is described. The changing views of Second and Third Internationals, and the organization and methods of the Comintern are discussed.

#### History 424. Diplomatic History of Europe

3 s.h.

A study of the diplomatic history of Europe since the Congress of Vienna. Emphasis is placed on the development of diplomatic practice and relations between states during the period 1870 to the present. The diplomatic origins and consequences of World War I and World War II are examined and compared. An analysis is made of Europe's importance in contemporary world diplomacy.

#### History 425. Intellectual History of Europe

3 s.h.

A study of important movements in European thought, with emphasis on the Nineteenth and Twentieth Centuries. Selected readings are done in the work of representative figures of the period: Burke, Mill, Hegel, Comte, Marx, Nietzsche, Freud, and others.

# History 427. French Revolution and Napoleon

3 s.h.

An analysis of the background of the French Revolution, its changing course, and cast of characters during 1789-99, and the advent to power and imperial regime of Napoleon Bonaparte, 1799-1814. The expansion of the Revolution and its significance for Europe are examined.

# History 429. Britain in the Twentieth Century

3 s.h.

An analysis of the major problems, economic, social, political, and international, which have confronted Britain in the Twentieth Century. The plans and policies of Conservative and Labour governments since 1919 are examined and compared.

#### Political Science 401. Comparative Governments

3 s.h.

This course offers an opportunity to study the political systems of the major world powers. Attention is given to the political institutions of Great Britain, France, and the Soviet Union. In each instance, political institutions are viewed against their economic and social backgrounds. Frequent comparisons are drawn between the American federal government and the foreign government considered in this course.

#### Political Science 402. American Party System

3 s.h.

An examination of the structure and functions of the American party system. Included in the study are: party organizations, the political boss, the political machine, the process of voting, election laws, primaries, conventions, platforms, presidential elections, majority rule, the party system, sectional politics, the farm vote, the labor vote, the Negro vote, and the future of party government in the United States.

#### Political Science 403. Public Opinion and Pressure Groups

3 s.h.

An investigation into the nature and development of public opinion and pressure groups and their influences on matters of public policy. Attention will be focused on the role of public opinion as it may affect the political processes such as the nomination of candidates and foreign and domestic policy decisions.

#### Political Science 404. International Relations

2 s.h.

A study of the modern international system; the forces affecting the interaction of states in their relations with one another; the resultant conflicts of interest and methods to resolve these conflicts. Special attention will be given to nationalism, imperialism, power politics, and conflicts.

#### Political Science 405. State and Local Government

3 s.h.

The municipal, county, and state governments of New Jersey furnish the principal subject matter of this course. Federal-state and interstate relations are explored and comparisons are drawn between New Jersey political institutions and those of other states.

#### Political Science 406. International Organization

2 s.h.

The attempts of the international community of states to express itself in a formal world organization are the subject of this course. The agencies which have been established to deal with international, legislative, executive, administrative, and judicial problems are studied, including the international courts of justice, League of Nations, and United Nations.

#### Political Science 451. Contemporary Africa

3 s.h.

This course is designed to give the background with which to develop an understanding of the social, political, and economic trends of modern Africa. An effort is made to establish the natural and historical setting for a consideration of colonial issues and policies, as well as decolonization and independence.

#### Political Science 452. The Far East

3 s.h.

A study is made of the economic, social, and cultural situation of the Far East, with particular emphasis on the geographic and historical background of India, China, and Japan. Political and social institutions are discussed with special attention to religion and education.

#### Political Science 453. South Asia

3 s.h.

Designed to give an understanding of political, economic, and cultural problems of contemporary South Asia, emphasis is given to post-World War II domestic problems of India, Pakistan, Ceylon, and their international relations with the world community.

#### Political Science 454, Modern Latin America

3 s.h.

This course is designed to give an understanding of the economic, social, and political character of contemporary Latin America. The history of these nations from their wars of independence to the present serves as background for the present state of affairs in this region. Students are given an opportunity to read works of Latin-American authors, to hear speakers from that area, and to see recent films.

# Political Science 455. The Middle East

3 s.h.

Starting with a consideration of the factors and forces that shape middle eastern civilization, this course goes on to consider the particular influences operating in the individual countries of the region. The nature of Islam is discussed along with the role of elements making for change, such as technology, the army, and the cold war. Many of the countries of Southwest Asia and North Africa are studied.

#### Sociology 401. Modern Sociology

3 s.h.

An introduction to sociology: the scope and aims of sociology; group behavior; social institutions in America; social organization, stratification, and change; the development of social leadership. (Not open to Social Studies majors who have completed Sociology 200.)

#### Sociology 402. Social Pathologies

3 s.h.

This course examines the nature and scope of social problems and deviant behavior in American society. Among the major social problems considered are juvenile delinquency, crime, poverty, prejudice, and our aging population. Public welfare programs concerned with rehabilitation and assistance are stressed throughout the course.

#### Sociology 403. Youth and the Community

2 s.h.

A sociological study of youth in contemporary rural, urban, and suburban America. Special consideration is given to social conditions giving rise to problems of maladjustment, anomie, and behavioral disorders in children and adolescents. Youth sub-cultures, and their effect on the school and community, are examined.

#### Sociology 404. The Family as an Institution

3 s.h.

This course examines the development of the family unit as an institution within society. Emphasis is placed upon an analysis of the family in contemporary American society. The family is sociologically examined as an institutional form, a social system in process, and as a socializing agency.

#### Sociology 405. Urban Sociology

3 s.h.

The study of the urban revolution and historic development of cities; the political and economic functions of cities; industrialization, urbanization and deracination; urbanism as a modern way of life. Urbanism is viewed not only as a new type of society, but as a process that is replacing all former types.

# Sociology 406. Rural Sociology

3 s.h.

During this course, offered at the New Jersey School of Conservation, the student comes face to face with rural life in northern New Jersey. Social proces-

ses and problems are considered. Opportunities are provided for students to attend Grange meetings, county fairs, rural dances and parties, and to live for a day or two with a farm family.

# Sociology 407. Race and Ethnic Relations in the United States

3 s.h.

This course is an examination of the historic problem of race and ethnic relations in the United States. The principal racial, ethnic, and religious minorities are considered against the social structural factors that underlie inter-group conflicts. In addition, those factors other than discrimination which seriously deter equal group achievement and integration are analyzed.

#### **COURSES IN FIELD STUDIES**

#### Field Studies 401. Continental United States

10 s.h.

This field-study course consists of sixty-two days of directed travel, including all of July and August, and provides an opportunity for gaining an integrated view of our country as a whole. All important geographic and historical features are studied under the instructions of members of the college faculty and local specialists.

#### Field Studies 402. Central Eastern Region

This fifteen-day tour of Pennsylvania, Maryland, Virginia, West Virginia, North Carolina, and Tennessee covers the major points of historic interest associated with the Colonial Period, the American Revolution, and the Civil War, and the geographic features of the coastal plain, the Piedmont, the Great Valley, and the Appalachian Mountains in these states.

#### Field Studies 403. New England and French Canada

This field study course gives an opportunity to study by direct observation the historical and geographical features of New England and the Province of Quebec. This trip, occupying the twelve days immediately following the summer session, is made in a modern chartered motor coach with overnight stops at firstclass hotels.

#### Field Studies 404. Florida

This is a field-study course covering the Florida Peninsula including both coasts, the Everglades, and the Lake Region. Among the places visited are ancient St. Augustine; the winter playgrounds at Palm Beach and Miami; the Tamiami Trail through the Everglades; the west coast cities of Sarasota, St. Petersburg. and Tampa, and the Lake Region in the neighborhood of Lake Wales and Orlando. The trip affords opportunity for topographical, historical, and industrial studies. It is usually given during the Easter vacation.

#### Field Studies 405. Gulf Coast and Lower Mississippi Valley

This is a field study covering the Gulf Coast from Mobile to New Orleans. It surveys economic, geographic, and historical aspects of the lower Mississippi Valley. Some places visited are Mobile, Biloxi, New Orleans, Baton Rouge, Natchez, Vicksburg, and Jackson.

#### Field Studies 406. Puerto Rico and Virgin Islands

2 s.h.

This is a nine-day field-study course devoted to a survey of our nearest island possessions. It includes an exploration of San Juan and its vicinity, including the University and the rain forest, a two-day trip through the island visiting pineapple, coffee, sugar, textile, and rum-producing areas, churches, homes, and historic places. One day is spent in St. Thomas, largest of the Virgin Islands. The trip to and from the islands is made by air. It is usually offered during the Christmas holidays.

#### Field Studies 407. Hawaii

3 s.h.

This is a twenty-day field-study course devoted to a study of our fiftieth state. It covers the islands of Oahu, Hawaii, Maui, and Kauai, and investigates all of the major geographic, historic, economic, and cultural features of the islands. Among the high points are Honolulu, and its environs, including Pearl Harbor; the pineapple, sugar cane, and papaya plantations of Oahu as well as the villages, mountain terrain, architecture, and historic spots; the Kona coast, the city of Hilo, the Kilauea crater and lava flows, the steam vents and sulphur banks, and the tree fern forests; the volcanic phenomena of the islands of Maui, and the canyons, caves, and geysers of Kauai, as well as the rice paddies. There are visits to schools and public buildings and opportunities to meet people of all classes.

#### Field Studies 411. Mexico

3 s.h.

This field-study course aims to give a comprehensive view of contemporary Mexican life with its geographic, economic, historic, and cultural setting. Transportation to and from Mexico City is by air and in Mexico by private cars. Places visited include Xochimilco, Acolman, Teotihuacan, Fortín, Puebla, Oaxaca, Guadalajara, Queretaro, Guanajuato, Patzcuaro, San Miguel de Allende, San Jose Purua, Morelia, Toluca, Taxco, and Cuernavaca. The itinerary is carefully planned to include all points of major interest and significance. Special studies may be made in geography, history, art, architecture, archaeology, sociology, economics, and other fields.

#### Field Studies 412. Maritime Provinces of Canada

3 s.h.

This is a twenty-one day field study covering Nova Scotia, Cape Breton Island, New Brunswick, and the Gaspe. The route runs through Vermont and Quebec to the Gaspe. It covers Nova Scotia and Cape Breton Island, including the Cabot Trail, and returns through Maine, New Hampshire, Massachusetts, and Connecticut. Among places visited and topics studied are: Riviere du Loup, picturesque fishing villages along the River and Gulf of St. Lawrence; lumbering and pulpwood operations; Gaspe; Perce with its bird sanctuary; Moncton, New Brunswick, with its tidal bore; St. John, New Brunswick, with its reversing falls; Truro, Digby; Grand Pre; Annapolis Royal; Lunenburg; Halifax, Sydney; Louisburg; Cape Breton Highlands National Park, the history of the conflicts between the French and the English for this territory, geographical and scenic phenomena, and customs and daily life of French-Canadian and English-speaking people of the region are observed.

#### Field Studies 413. Three Contrasting Caribbean Cultures: Curacao, Caracas, Trinidad

2 s.h.

This field study course will study the Dutch culture of the island of Curacao, the Spanish culture of Caracas, Venezuela, and the English culture of the island of Trinidad. Stops will also be made in Barbados. Since the western islands of the West Indies can no longer be visited, this, together with the Puerto Rico-Virgin Island tour given at Christmas, provides a unique opportunity to become familiar with the best aspects of the Caribbean area. These two trips complement each other.

#### Field Studies 421. Mediterranean Region and Holy Land

6 s.h.

This is a seven-week field study of the countries adjacent to the Mediterranean Sea, including short stops in Paris, Madrid, and Athens, and more intensive studies of Italy, Turkey, Syria, Lebanon, Israel, Jordan, Egypt, Tunisia, and Morocco. The ancient and modern civilization of these countries will be studied with particular attention to their significance in the contemporary world. Opportunities for special studies in specific areas of geography or history will be available to students.

#### Field Studies 422. Soviet Union and Eastern Europe

6 s.h.

This field study provides an exceptional opportunity to study the social, economic, and political systems of the Soviet Union and other communist countries. The group will fly from Copenhagen to Warsaw and Moscow, Leningrad, and Kiev, and then proceed to Alma Ata, Tashkent, Bukhara, Samarkand, Dushanbe, Tbilisi, and Sochi. It will return to Copenhagen via Budapest, Vienna, and Prague.

#### Field Studies 431. South Pacific

6 s.h.

This is a seven-week field study course covering the islands of the South Pacific region, Australia, and New Zealand. The purpose of this course is (1) to study the various culture patterns of these islands, (2) to appreciate their significance in recent history and in the future history of the Twentieth Century, (3) to understand the importance of Australia and New Zealand in the modern world. Among the places to be visited are Tahiti, Fiji, New Zealand, Australia, East New Guinea, Papua, New Caledonia, the Isle of Pines, Samoa, Hawaii, and other islands. The geographic, historical, economic, and anthropological patterns of the region are studied. There are visits to farms, mines, schools, public buildings, and native villages, and opportunities to meet people in all sorts and conditions of life.

#### Field Studies 432. North Pacific

6 s.h.

This is a seven-week survey of the North Pacific area including Hawaii, Japan, and Alaska; about two and a half weeks are spent in each of the three areas. In Hawaii all four of the leading Hawaiian Islands (Oahu, Hawaii, Maui, and Kauai) are studied. In Japan, studies will be made in Tokyo, Nikko, Kyoto, Nagoya, Hakone, and other areas emphasizing Japan's economic progress, education, home life, scenic and cultural features, and the people of Japan. In Alaska, Anchorage, Nome, Kotzebu, Juneau, and other centers are visited; seeing Eskimo, pioneer, and contemporary life, emphasizing ways of living, crafts, and the economic and social developments of the forty-ninth state.

#### Field Studies 451. World Survey

4 s.h.

This is a thirty-five day field-study course planned to give the student a general comprehensive vision of the kind of a world we live in with its varying culture patterns and problems. The itinerary covers the Tokyo and Kamakura area in Japan; Manila and its environs in the Philippines; Calcutta, Delhi, Agra, and Bombay in India; Cairo and Memphis in Egypt; Hong Kong, and the Kowloon Peninsula in southeast China; Bangkok in Thailand; Jerusalem and Damascus in the Holy Land, Baalbeck and Beirut; Istanbul; Athens and Corinth; and Rome.

# THE DEPARTMENT OF SPEECH

Graduate Advisor: DR. L. HOWARD FOX

Speech education in the schools of New Jersey has received increasing recognition in recent years with the conviction that effective oral communication is important to the achievement of self-realization, vocational competency, social effectiveness, and good citizenship. Additional programs of speech are being established to provide developmental and corrective work according to each student's needs. The effectiveness of those programs depends upon the sound and extensive preparation of master teachers who can organize and supervise speech programs and who can offer dynamic leadership in helping to integrate the speech program in the over-all school curriculum.

The graduate program in speech allows qualified students to specialize in one of two areas of speech education: speech arts or speech therapy. The candidate may also, through his choice of elective courses, strengthen his competencies in both areas.

It is expected that each graduate student will have at least one of the following goals for his work:

- 1. To be further qualified as a speech therapist in schools and special in-
- 2. To increase his skill as a teacher of speech and dramatics in secondary schools.
- 3. To complete requirements for certification in the State and in the national professional organization, the American Speech and Hearing Association.

# PREREQUISITES FOR ADMISSION TO THE PROGRAM IN SPEECH ARTS

Students wishing to matriculate in this area of specialization must have completed the following courses, or equivalents, and hold a New Jersey State Department of Education certificate in Speech Arts.

Each student must also be capable of setting a good example of acceptable speech. If his voice and speech patterns are considered to be substandard he will be required to take Speech 550 early in his period of matriculation; if the speech problem is severe, he may be refused permission to matriculate.

Eighteen semester hours of Professional Education courses including the Methods of Teaching Speech and Dramatics.

Eighteen semester hours of specialization courses with at least one course in each of the following areas:

#### Area:

Fundamentals of Speech— Public Speaking-Oral Interpretation— Methods in the Teaching of Speech—

Dramatics-

#### Courses:

Speech 439A, 439B, 472, 100, 103, 104, 208.

Speech 449, 462, 470, 204.

Speech 106, 448.

Speech 417.

Speech 107, 108, 435, 436, 437A, 437B, 438, 456, 471.

# REQUIREMENTS FOR THE M.A. DEGREE IN SPEECH ARTS I. General Education (see Master's Degree Program Pattern)

II.	Basic Professiona	al Education (see Master's Degree Program Pattern) 6-9 s.h.	,	
ш.	Specialization Co	ourses 11-20 s.h.		
	A. Required Con Speech 449. Speech 462. Speech 470. Speech 565. Speech 567. Speech 592.	Advanced Public Speaking, or Group Discussion, or Argumentation and Debate, or Advanced Oral Interpretation Seminar in Dramatic Production		
	B. Electives: Through advisement and based on needs and int student.			
	Speech 448. Speech 457. Speech 464. Speech 471. Speech 550. Speech 563. Speech 564. Speech 566. Speech 590. Speech 591.	Directing the Assembly Program 2 s.h. Psychology of Oral Communication 2 s.h. Advanced Acting 2 s.h. Advanced Study of Voice and Speech Production 3 s.h. Scenery Design and Construction 3 s.h. History of the Theatre 2 s.h. Costume and Make-up for Stage 3 s.h. Problems in the Teaching of Speech 3 s.h. Organization and Administration of School Speech Programs 2 s.h.		
	1. Written (	epartmental Requirements:  Comprehensive Examination.  arry, graduate faculty may require a supplementary oral ex-		

2. Oral demonstration of communication skill.

amination.

Prior to the student's final semester, each Master's degree candidate must give evidence of satisfactory platform or performance skill beyond the prerequisite requirement of satisfactory personal speech. The type of performance or demonstration is to be arranged with his advisor prior to the scheduling of any such event; its nature will depend upon the individual experience and goals of each candidate.

Minimum: 32 s.h.

6-12 s.h.

# PREREQUISITES FOR ADMISSION TO THE PROGRAM IN SPEECH THERAPY

Students wishing to matriculate for the Master of Arts in Speech Therapy must have completed thirty semester hours in the following courses, or equivalents, and hold or be eligible for a New Jersey State Department of Education certificate in Speech Correction:

Each student must also be capable of setting an example of acceptable speech. If his voice and speech patterns are considered to be substandard, he will be required to take Speech 550 early in his period of matriculation; if the speech problem is severe, he may be refused permission to matriculate.

A minimum of 9 s.h. in Professional Education Courses, with at least one course in each of the following areas:

Principles and Practices of Education Educational Psychology Curriculum

A minimum of 18 s.h. in the following courses or their equivalents:

A minimum of 18 s.h. in the follo	wing courses or their equivalents:
Course:	Undergraduate M.S.C. course(s) meeting this requirement:
	meeting this requirement.
Psychology and/or Education of the	T.1 4' 450
Handicapped	Education 452
Phonetics	Speech 208
Anatomy and Physiology of the	S
Auditory and Vocal Mechanisms	Speech 104
Speech Correction	Speech 209
Speech Pathology	Speech 410 Speech 461A, 461B
Clinical Practice in Speech Measurement of Hearing (Audiology)	Speech 468
Voice and Diction Improvement	Speech 103
voice and Diction improvement	Speech 103
REQUIREMENTS FOR THE M.A. IN	SPEECH THERAPY
I. General Education (see Master's D	egree Program Pattern) 6-12 s.h.
II. Basic Professional Education (see M	Master's Degree Program Pattern) 6-9 s.h.
III. Specialization	11-20 s.h.
A. Required Courses:	9 s.h.
	nar in Speech, Hearing and
	orders
Speech 535B. Graduate Pract	icum in Speech, Hearing and
	orders
	iology, or approved elective 3 s.h. aniques of Research in Speech 3 s.h.
•	·
*These courses taken concurrently ma quirement for part-time graduate stude	y constitute full-time summer session re- ent.
B. Elective Courses:	2-11 s.h.
Selection from among the following	owing courses will be determined through
	n needs and interests of each student.
	ch Pathology 3 s.h.
Speech 412. Speech Diagno	osis
	rs
Speech 439G. Speech Correc	tion 2 s.h.
Speech 481A, 481B. Teaching	Neurologically Impaired
Children	2 s.h. each
	2 s.h.
	and Material in Teaching Speech
	npaired Children 2 s.h. each
	Deformities 2 s.h.
	Speech and Hearing Programs 2 s.h.
	tomy and Physiology of the
	ditory Mechanisms 3 s.h.
Speech 522. Advanced Pho-	netics 2 s.h.

Speech Speech		Practicum in Speech Rehabilitation
Speech	472.	Voice Science 2 s.h.
Speech	594A,	594B. Independent Study in Speech
		Rehabilitation 1 s.h. each
Speech	469.	Auditory Rehabilitation
Speech	531.	Advanced Audiology 3 s.h.
Speech	550.	Advanced Study of Voice and Speech Production 3 s.h.

#### C. Additional Departmental Requirements:

- Written Comprehensive Examination.
   If necessary, graduate faculty may require a supplementary oral examination.
- 2. Oral demonstration of communication skill. Prior to the student's final semester, each Master's degree candidate must give evidence of satisfactory platform or performance skill beyond the prerequisite requirement of satisfactory personal speech. The type of performance or demonstration is to be arranged with his advisor prior to the scheduling of any such event; its nature will depend upon the individual experience and goals of each candidate.
- Majors in speech pathology must complete a total of 275 hours of supervised direct clinical experience.

# Minimum: 32 s.h.

#### **GRADUATE COURSES**

#### Speech 522. Advanced Phonetics

2 s.h.

Skill in the use of phonetics is developed further in recognizing and distinguishing acceptable English speech sounds, deviant speech sounds, regional variations in standards of American English, and sounds in foreign languages. Additional study is devoted to the stress, phrasing, and intonation patterns used in speaking English, with some analysis made of these elements on other languages. Prerequisite: Sp. 104 or equivalent.

#### Speech 531. Advanced Audiology

3 s.h.

The purpose of this course is to increase skill in administering tests for determining pure-tone and speech reception thresholds. Emphasis is placed on evaluation and interpretation of test results and on the analysis of client histories. Principles and techniques of hearing aid evaluation, measurement of recruitment, and tests for psychogenic deafness and malingering are studied. Consideration is also given to pre- and post-surgical auditometry, and to the special problems of differential diagnosis in testing children. Prerequisite: Sp. 468 or a basic auditology course.

#### Speech 532. Practicum in Speech Rehabilitation

2 s.h.

This course provides advanced students with the opportunities for the practical application of diagnostic and rehabilitative techniques with children and adults who have major speech and language problems. Qualified students participate in specialized laboratory experiences which include planning and supervising speech therapy sessions, providing rehabilitative services to individuals and small groups, interviewing applicants, and administering audiometric tests. Prerequisite: 60 clinical hours in speech practicum.

#### Speech 533. Supervision of Speech and Programs

2 s.h.

Methods of organization and administration of the speech correction and improvement programs are discussed. Emphasis is placed upon problems of

screening, referral, speech-staff training and orientation, in-service courses, parent and community relations, integration with other disciplines, and development of new materials for testing, teaching, and evaluating.

# Speech 534. Advanced Anatomy and Physiology of the Vocal and Auditory Mechanisms

3 s.h.

The basic anatomy of the mechanisms of speech reception and expression is reviewed. Consideration is also given to the integrated functioning of the central nervous system, the automatic nervous system, and the endocrine system. The effects of abnormalities of structure and function of the speech and hearing processes are emphasized. Discussion includes the medical and surgical aspects of rehabilitation, and the hygiene of the ear, nose, and throat. Demonstrations and supervised laboratory dissections are included. Prerequisite: Sp. 208 or equivalent.

#### Speech 535A. Graduate Seminar in Speech, Hearing, and Language Disorders

3 s.h.

#### Speech 535B. Graduate Practicum in Speech, Hearing, and Language Disorders

3 s.h.

Emphasis is placed upon the diagnostic, therapeutic, and evaluative techniques employed in working with children and adults who have speech disorders of organic etiology. Minimum of 135 clock hours of supervised teaching must be accumulated. Prerequisite: Sp. 410 (These courses taken concurrently may constitute full-time summer session requirement for part-time graduate students.

# Speech 550. Advanced Study of Voice and Speech Production

3 s.h.

The study is made of materials and methods used in the teaching of speech fundamentals on the junior high and senior high school levels. Review and further application of basic subject matter, including English and comparative phonetics, are stressed. Opportunities are provided for practice in improving or further developing personal voice and speech skills, in directing the practice of students with minor speech difficulties, and in phonetically transcribing speech from phonograph records or tape recordings. Some consideration is given to methods of helping students for whom English is not a native language to improve their voice and speech. Prerequisite: Sp. 100, Sp. 103, or equivalent.

#### Speech 563. Scenery Design and Construction

3 s.h.

This course is designed to extend the advanced speech student's knowledge in scenery design and construction techniques. Special emphasis is placed upon stage design as related to the play, the director, and the audience. The course of study includes a survey of the styles of design and the use of the perspective sketch and stage model in planning the stage setting. The application of stage construction techniques is used to demonstrate the necessity of scene design in planning the stage production. Each student is expected to design and plan the construction of scenery for a play appropriate for production in a secondary school.

# Speech 565. Advanced Oral Interpretation

2 s.h.

This course is designed to provide further study of techniques in interpretation of poetry and prose. Extensive practice is provided in the analysis and presentation of various types of literary material (short story, ballad, narrative, sonnet, etc.) suitable for use in the classroom and for special programs. Prerequisite: Sp. 106 or equivalent.

#### Speech 566. Costume and Make-up for the Stage

3 s.h.

This course provides the advanced student with opportunities to design costumes and make-up for plays of various periods. Consideration is given to the

use of materials, colors, and textures in achieving desired effects on the stage. Laboratory work is provided to develop skill in creating a wide variety of make-ups.

#### Speech 567. Seminar in Dramatic Production

6 s.h.

This seminar is for advanced play-production students. It allows each member of the class to pursue projects in keeping with his needs or interests in both the technical and directorial aspects of play production. When possible, supervisory assignments are made in connection with the current program of plays. The seminar meets a minimum of four hours daily for individual project or laboratory activities, for evaluation of specific teaching problems in connection with the current plays, and for group analysis of typical production problems. Enrollment is open only to matriculated students and others with permission.

#### Speech 590. Problems in the Teaching of Speech

3 s.h.

3 s.h.

This course is designed to present an analysis and investigation of the problems encountered in the speech classroom, and to survey the textbooks and teaching aids available to the teacher of speech on various grade levels. Consideration is also given to the problems of (1) motivation, (2) methodology, (3) evaluation procedures, and (4) co-curricular speech activities.

# Speech 591. Organization and Administration of the School Speech Program 2 s.h.

This course deals with the problems of organizing and administering a comprehensive speech program in a school system. Consideration is given to curriculum development, teacher-administration relationships, class scheduling, reports and records, in-service training, and integration of the speech program with the total school curriculum.

# Speech 592. Areas and Techniques of Research in Speech

Methods of research appropriate for studies in speech are analyzed. Significant problems in the field are investigated and discussed, and published research projects are evaluated. Special attention is given to the problems of locating and utilizing professional journals and other publications for research. Each student is required to prepare an outline for a research project, to develop a bibliography, to complete the research, and to submit a formal report of the project. Prerequisite: Educ. 503.

# Speech 594A, 594B. Independent Study in Speech Rehabilitation 1 s.h. each

Students on the graduate level may select an area of speech rehabilitation and with advisement study the literature in the field, observe therapy at special schools and centers, and write reports on findings. Regular conferences with their instructor are arranged for guidance and for evaluation.

#### SENIOR-GRADUATE COURSES

The following courses may be applied as prerequisites or equivalencies for admission to the program. In certain instances some are acceptable for graduate credit if the advisor so recommends,

#### Speech 410. Speech Pathology

2 s.h.

This course presents a study of the etiology and pathology of major language and speech disorders which may result from organic, functional, or emotional disturbances: severe stuttering, dysphonia, laryngectomy, cleft palate, cerebral palsy, and aphasia are included. Emphasis is placed upon diagnosis, evaluation, and rehabilitation. Prerequisite: Sp. 439B, or the equivalent.

# Speech 411. Advanced Speech Pathology

3 s.h.

The purpose of the course is to provide further study and evaluation of modern techniques of speech rehabilitation, and to review research findings in the areas of voice, articulation, rhythm, and symbolization disorders. Consideration is given to the ways in which speech rehabilitation may be integrated with related health services and educational services in schools and special centers. Prerequisite: Sp. 410 or equivalent.

#### Speech 412. Speech Diagnosis

3 s.h.

The purpose of this course is to analyze and evaluate popularly employed techniques of speech diagnosis. Commercially available diagnostic tools, as well as tests that may be designed by the therapist to meet specific needs are discussed. Consideration is also given to the dynamics of interviewing and to the reporting and interpreting of client histories. Specific methodology useful in providing speech rehabilitation services to children and adults with speech and language disorders is evolved. Prerequisite: Sp. 410 or equivalent.

#### Speech 435. Stagecraft

2 s.h.

This workshop course provides training in constructing and painting of scenery and in lighting the stage. A minimum of twelve clock hours in the scene shop is required, in addition to the regular class sessions. Recommended prerequisite: Sp. 108 or the equivalent.

#### Speech 437A. Dramatic Production Workshop: Acting

2 s.h.

# Speech 437B. Dramatic Production Workshop: Technical Theater

2 s.h.

These courses are designed for those students desiring a comprehensive introductory course in theater production. Students participate as junior members of the summer-theater company. They place special emphasis upon either stagecraft and lighting, or acting. In addition, they participate in the costuming, make-up, and house-management activities. These courses may be used as partial fulfillment of the requirements of the undergraduate speech major or minor, or as a pre-requisite to matriculation for the Master's degree in Speech.

# Speech 436. Fundamentals of Stage Lighting

3 s.h.

The purpose of the course is to analyze the functions of light on a stage and to study and use the instruments available to achieve desired effects. Optimum and minimum equipment are studied. The laboratory work is done in the Memorial Auditorium at the College, which houses modern and flexible stage lighting equipment, and in a small auditorium with limited facilities. Students are encouraged to apply the principles of stage lighting to the specific auditoriums in which they may work. Appropriateness of lighting for different types of stage activities is a fundamental consideration in the course. Prerequisite: Sp. 108 or Sp. 435 or permission of instructor.

#### Speech 438. Creative Dramatics

2 s.h.

The purpose of this course is to study the principles and techniques of creative dramatics as they may be applied in the classroom, theater, and speech therapy program. Major emphasis is placed on materials for dramatization paralleling the mental, physical, and emotional levels of children in grades kindergarten through eight. Application of these techniques with high school students is also considered. The philosophy of creativity is discussed, and attention is given to the integration of the arts with the total educational program. The course includes a workshop in which members of the class plan and carry out creative activities with children.

# **Workshop in Speech Correction**

The following courses are especially designed for students who wish to fulfill certification requirements to teach children with speech disorders or for graduate students needing to fulfill prerequisites for matriculation for the Master's degree in Speech. Specialized areas in the speech sciences are offered as a workshop with attendance required during all or part of the six-week summer session, depending upon the number of units elected. Speech 439A, 439B, 439C must be taken in sequence. (439D may be taken with 439C.)

# Speech 439A. Phonetics

2 s.h.

An intensive study is made of the manner and place of articulation of sounds heard in American English. Skill is developed in using the International Phonetic Alphabet to transcribe speech both prescriptively and descriptively, from live and recorded voices. Consideration is also given to the intonation and stress patterns of spoken English.

# Speech 439B. Anatomy and Physiology of the Auditory and Vocal Mechanisms

3 s.h.

The work of this course entails a detailed study of the larnyx and ear as they function in the production and reception of speech. Consideration is also given to the physics of sound and to the structure and functioning of the nervous system.

# Speech 439C. Speech Pathology

2 s.h.

The purpose of this course is to present a comprehensive analysis of the major pathologies of articulation, voice, rhythm, and symbolization. The etiology and treatment of severe stuttering, aphasia, cerebral palsy, and the dysphonias are discussed.

#### Speech 439D. Practicum in Speech Correction

1 s.h.

#### Speech 439E. Advanced Practicum in Speech Correction

1 s.h.

Students are required to spend forty-five clock hours in the Speech and Hearing Center for each semester-hour of credit in order to gain experience in planning and carrying out programs in therapy with children who have speech and hearing problems. Written observation reports, lesson plans, and progress reports are required. Students also participate in staff conferences and meetings with parents of children enrolled for speech therapy. Practicum hours may also be arranged at local speech centers and hospital units. Prerequisite: A course in speech correction.

#### Speech 439F. Voice Disorders

2 s.h.

The purpose of the course is to study selected disorders of voice production. Consideration is given to etiology, pathology, and therapy related to vocal nodules, contact ulcers, paralysis of the vocal cords, and other organic voice problems. Speech rehabilitation techniques for the laryngectomized and for persons with cleft palate conditions are also discussed. Prerequisite: Sp. 439B and C, or consent of the instructor.

# Speech 439G. Speech Correction

2 s.h.

This course presents an introduction to the area of speech development and correction, with emphasis on voice and speech problems commonly found in children at the nursery, elementary, and secondary-school levels. Consideration is given to the following: (1) subject matter; (2) diagnostic, remedial, and evaluative techniques; (3) testing and practice materials. Demonstrations with children who have faulty patterns of speech or whose speech development has been retarded are provided. Opportunities are provided for students to

serve as cadet teachers in the Speech and Hearing Center by generally assisting the therapists and by observing therapy with children who have speech disorders.

#### Speech 440. Theater History: Classical to Elizabethan

2 s.h.

This course is designed to offer the student a comprehensive view of the development of the theater from the classical Greek through the Elizabethan period. Special attention is placed upon plays and playwrights of the period, theater architecture, scenery, costuming, styles of acting and presentation of each period. Course work includes oral reports, lectures, and classroom demonstrations.

#### Speech 441. Theater History: Restoration to Modern

2 s.h.

This course is designed to extend to the student a comprehensive view of the development of the theater from the Restoration through the modern period. Special attention is placed upon plays and playwrights of the period, theater architecture, scenery, costuming, styles of acting and presentation of the period. Course work includes oral reports, lectures, and classroom demonstrations.

#### Speech 448. Choral Speaking

2 s.h.

In a speaking choir, students acquire skill in interpreting literature suitable for group practice. Consideration is given to their use in the various grade levels in teaching. Students prepare a group of selections for their particular interests and purpose.

#### Speech 449. Advanced Public Speaking

2 s.h.

This is an advanced course in the theory and practice of public speaking. It provides opportunities for further training in more complex speech skills, especially in persuasive speaking, and conducting a meeting. Prerequisite: Sp. 204 or the equivalent.

# Speech 456. Play Direction

3 s.h.

This course covers choosing, casting, and directing plays. Scenes are directed for class criticism, and a detailed prompt-book of one play is prepared. If possible, this play is given publicly before an audience. This course complements Sp. 435. Prerequisite: Sp. 437B, or permission of the instructor.

#### Speech 457. Directing the Assembly Program

2 s.h.

It is the purpose of this course to prepare students to organize and to conduct assembly programs. Class lectures and discussions cover all phases of the director's responsibilities. Groups conduct research on suitable program materials and share their findings. Each student prepares either a detailed script for an assembly or commencement program or a comprehensive set of notes and materials.

#### Speech 461A, 461B. Practicum in Speech Correction, I and II 2 s.h.

Remedial speech laboratories are maintained at the College as a community service so that students may apply their knowledge of diagnostic, remedial, and evaluative techniques in a professional laboratory experience. Students assist staff members in demonstrations, prepare lesson plans for individual and group speech therapy and teach under supervision. Prerequisites: Phonetics and Speech Correction.

# Speech 461C. Advanced Practicum in Speech and Hearing

2 s.h.

This course provides further opportunities to apply techniques of speech and hearing rehabilitation under supervision in a laboratory setting. Students are required to: (1) administer audiometric tests and speech diagnostic examinations; (2) work with parents of children who have speech disorders; and (3) assist the

beginning student speech therapist in planning and carrying out therapy sessions. Prerequisite: Sp. 461A and B.

#### Speech 462. Group Discussion and Leadership

3 s.h.

The purpose of this course is to study the principles of democratic discussion and the methods employed in guiding and participating in the informal group discussion, and in the panel, symposium, lecture, and debate forum. Parliamentary procedure is considered. Opportunities in the application of principles and methods studied are given through student participation in discussion programs dealing with community and national problems. Attention is also given to the ways in which group discussion may be used as an effective teaching method in the general school curriculum.

# Speech 464. Psychology of Oral Communication

2 s.h.

This course deals with the development of speech and language in the individual and the problems of communication that lead to confusion of meaning and misunderstanding. Consideration is given to the psychology of persons who are handicapped in speech, hearing, and/or reading, including those with hysterical or psychogenic impairments. The contributions of learning theory and of semantics of communication are studied.

# Speech 466. Speech Development: Improvement and Re-education 2 s.h.

This course is intended for superintendents, principals, and classroom teachers who have little or no background in speech education. Consideration is given to the following topics: (1) speech development; (2) speech difficulties or problems found in the kindergarten, elementary, and secondary schools; (3) acquisition of good voice and speech characteristics; (4) use of techniques and materials in classrooms to motivate good speech patterns; and (5) ways of organizing and integrating speech education within school systems. Demonstrations with individuals and groups are made, and students are expected to prepare a practical project. (Not for Speech majors.)

#### Speech 468. Measurement of Hearing

3 s.h.

A comprehensive study of the measurement of hearing is made in this course with attention given to the educational implications of partially impaired audition and of deafness. A review of the physics of sound and the anatomy and physiology of the auditory mechanism is included. Emphasis is placed on principles and techniques of screening tests, interpretation of test results, and pure-tone and speech audiometry. Demonstrations and supervised practice are provided. Prerequisite: Sp. 208 or equivalent.

#### Speech 469. Auditory Rehabilitation

2 s.h.

The purpose of the course is to study the current theories and practices of teaching speech reading and auditory comprehension to hard-of-hearing children and adults. The educational problems of helping the student to gain proficiency in speech reading as a receptive language process are discussed. Principles of auditory training are studied as a means to help develop the use of residual hearing. Emphasis is placed on the ways in which speech reading and auditory comprehension supplement each other in the rehabilitation of the hard-of-hearing individual. Practical consideration is given to the preparation of lessons for the acoustically impaired at all grade levels.

#### Speech 470. Argumentation and Debate

3 s.h.

A study is made in this course of the principles of argumentation including characteristics of propositions, definition of terms, logical organization, evidence, and oral argumentation techniques. Consideration is also given to the organization and coaching of school forensic programs. Practice and experience are afforded the student in argumentation and debate on current, significant issues.

# Speech 471. Advanced Acting

2 s.h.

Through three areas of activity this course aims to broaden the student's appreciation of the art of acting and to increase his own acting skill. This is accomplished through individual study of established actors and schools of acting, through critiques of acting as observed by attending professional productions, and mainly through preparation of solo and group acting exercises, both original and from established dramatic literature. As far as possible, attention is paid to the student's future personal use of the material and exercises of the course. Prerequisite: Sp. 105B. or its equivalent, with a grade of "B" or better, or the permission of the instructor.

# Speech 472. Voice Science

2 s.h.

Study of the scientific bases of the production of voice and articulations as a foundation for improvement in skill in speech.

# Speech 481A, 481B. Teaching Neurologically Impaired Children 2 s.h. each

A. Theory and methodology. Study of the causes and effects of neurological impairment in school age children. Emphasis will be on methods effective in helping children whose perceptual dysfunctioning interferes with development of communication and of learning. Demonstrations with neurologically impaired children will serve as the basis for study and discussion.

B. Demonstration and practice teaching. Student teaching, under supervision, of groups of children who have neurological impairments. Discussion and evaluation will follow each lesson. Parents of the children will take part in the conferences with the teachers. (Credit for whole course dependent upon completion of part B.)

# Speech 482. Stuttering

2 s.h.

Principles and methods of speech therapy with children who stutter. Methods of evaluation, specific techniques of speech therapy, and principles coordinating speech therapy with home and with school life will be the focus of this practical course. Demonstrations with children who stutter will serve as the basis for study and discussion.

# Speech 483A, 483B. Methods and Materials in Teaching Speech to Language Impaired Children—I and II 2 s.h. each

I. Nature and needs in helping language impaired children to develop concepts for expressing thoughts and needs. Special emphasis on mentally retarded children. Demonstrations with trainable and educable children, aphasic children, and schizophrenic children.

II. Methods, materials, and programs for teaching children with language impairments in a supervised and evaluated clinical practicum on campus.

# Speech 484. Cleft Palate and Oral Deformities

2 s.h.

Study of etiology and characteristics of cleft palate and oral deformities or malfunctions in children. Emphasis on speech therapy and surgical repair procedures. Unit on tongue thrust therapy is also included.

# **General Education Courses in Speech**

The following courses may be chosen by matriculated students (other than Speech majors) to meet the requirements in General Education outside their specific area of specialization:

Speech 436, 437, 438, 440, 441, 448, 449, 462, 470, 550, 563 (with permission of instructor), 565.

# THE NEW JERSEY STATE SCHOOL OF CONSERVATION

Director: DR. JOHN KIRK

The six State Colleges, the State Department of Education, and the State Department of Conservation and Economic Development jointly operate the New Jersey State School of Conservation at Lake Wapalanne in Stokes State Forest, Sussex County. Credit for the courses given at the New Jersey State School of Conservation may be applied toward the Master's degree at the New Jersey State Colleges, subject to the approval in advance by the institution concerned. Students are advised to check with their advisors relative to the application of these credits towards graduate degrees.

The following courses may be offered at the New Jersey State School of Conservation. For complete descriptions, please refer to the departmental writeups appearing in this bulletin. Special descriptive announcements may also be had by writing to the New Jersey State School of Conservation, Branchville, New Jersey.

#### FINE ARTS DEPARTMENT

Fine Arts 415. Designing in Native Materials Fine Arts 474. Arts and Crafts in Education

#### GEOGRAPHY DEPARTMENT

Geography 420. Field Geography and Conservation

#### INDUSTRIAL ARTS DEPARTMENT

Industrial Arts 442. Conservation of Basic Industrial Materials Industrial Arts 443. The Use of Basic Industrial Materials in Industry

#### EDUCATION DEPARTMENT

Education 440. Camping Education

Education 441. Conservation Education

Education 442. Practicum in Camp Leadership

Education 443. Practicum in Camping Education and Administration

Education 444. Practicum in Conservation Education Education 480. Field Science for Elementary Teachers

#### HEALTH AND PHYSICAL EDUCATION DEPARTMENT

Physical Education 410. Water Safety and First Aid

#### SCIENCE DEPARTMENT

Science 405. Field and Laboratory Studies in Science

Science 411. Problems in Field Studies in Science

Science 412. Field Studies in Science: Biological

Science 413. Field Studies in Science: Physical

Science 414. Conservation of Plants and Animals Science 415. Conservation of Soil and Water

Science 419. Field Science and Conservation

Science 420. Water Supply and Conservation Problems

#### SOCIAL STUDIES DEPARTMENT

Social Studies 477. Rural Sociology

Social Studies 482. Conservation and Rural Economic Life

Social Studies 494. Social Studies and Conservation

# SUPPLEMENT

MONTCLAIR STATE COLLEGE

Graduate Bulletin
1966-1967

# DEPARTMENT OF EDUCATION

Note: This is a new program

# ADMISSION TO AND REQUIREMENTS FOR THE M.A. DEGREE IN READING SPECIALIZATION (7-12)

# **Admission Requirements**

Requirements are those for all graduate students applying for matriculation into a Master's Program at Montclair State College.

Matriculation normally requires prior completion of the basic courses in reading education needed for New Jersey certification to teach reading.

Provision is made in this program to matriculate certified secondary school teachers who have demonstrated interest and ability suitable to reading education. These applicants shall furnish acceptable evidence of talent appropriate for competence in reading instruction. Evidence, for example, may be in the form of letters of recommendation from the school system superintendent or the school building principal.

# **Degree Requirements**

Satisfactory completion of not fewer than thirty-two semester-hours of work as follows: (In exceptional cases appropriate substitutions or changes may be made in these requirements upon approval by the Program Advisor).

I.	General Education (see Master's Degree Program Pattern) 6-12		
П.	Basic Professional Education (see Master's Degree Program Pattern) 6-9 s		
	Elect courses from the following:		
	Graduate Courses:		
	Ed. 500. Recent Trends in Secondary School Methods		s.h.
	Ed. 514.	School Law	s.h.
	Ed. 550.	Guilding the Reading Interests of Secondary	
	School Students		
	Ed. 560.	Advanced Educational Psychology 2	s.h.
	Ed. 561.	Child and Adolescent Development 2	s.h.
	Ed. 562.	Principles of Mental Hygiene 2	s.h.
	Ed. 566.	Psychology and Education of the Gifted	s.h.
	Canion Cu	aduate Courses:	
		***************************************	
	Ed. 406.	Educational Sociology	
	Ed. 408.	Selection & Utilization of Audio-Visual Materials 2	
	Ed. 453.	Social Psychology	
	Ed. 492.	Comparative Education 3	s.h.
	Graduate and Senior-Graduate Related Courses:		
	A stu	ident may receive credit for one or the other courses selected i	from
	each pair,	but not both.	
	Ed. 501.	Tests & Measurements in Secondary Education—or 2	
	Ed. 491.	Measurement & Evaluation in Teaching & Learning 3	s.h.
	Ed. 564.	Psychology and Education of Exceptional Children: Physical and Mental—or	e h
	Ed. 452.		
	Ed. 452. Ed. 565.		3,11,
	Lu. 303.	Social and Emotional—or	s.h.

		580. Principles and Techniques of Guidance—or	
m.	Spe	cialization in Reading	s.h.
	A.	Required courses for all candidates:	
		Ed. 552. Principles of Reading Improvement in	
		Secondary Schools	s.h.
		Ed. 554. Case Studies of Reading Difficulties	
		Ed. 556. Corrective and Remedial Reading	s.h.
	-	#Ed. 659. Research Seminar in Reading	s.h.
	B.	Elective Courses:	
		Selections among the following courses will be determined through	ad-
	vise	ment and will be based on needs and interests of each student.	
		Reading Electives (Students must take at least one of these courses.)	)
		*Ed. 551N. Organization & Administration of Secondary School Reading Programs	s h
		Ed. 553. Techniques of Reading Improvement in	3.11.
		Secondary Schools	s.h.
		Ed. 555. Case Studies of Reading Difficulties: Part II	s.h.
		Ed. 557. Corrective and Remedial Reading: Part II	
		#Ed. 558. Field Experience in Reading	
		Courses Specifically Related to Reading:	
		English 512. Growth & Structure of the English Language 2	s.h
		English 516. Language Problems in the English Curriculum 2	
		English 541. The New Grammar	
		Speech 439A. Phonetics	
		Speech 439G. Speech Correction	
		Speech 464. Psychology of Oral Communication	
		Speech 466. Speech Development: Improvement and	
		Re-Education	
		Speech 468. Measurement of Hearing	s.h.
		amber but New Course	
#Ne	ew C	ourse	
		Education 408. Selection and Utilization of	
		Audio-Visual Materials 2	s.h.
		Education 564. Psychology and Education of Exceptional	
		Children: Physical and Mental	s.h.
		Education 565. Psychology and Education of Exceptional	
		Children: Social and Emotional 2	s.h.
	C.	Additional Requirements:	
		1. Supervised clinical experience within the framework of a requ	
		course and/or in addition to course work. Arrangements will	be
		made to provide this experience in the Montclair State College cam	npus
		Reading Center.	
		2. A written comprehensive examination, supplemented, if necessary	, by
		an oral examination.	

# COURSES

Education, English, and Speech courses are listed in their respective departments in this catalog.

Additional courses in Reading Specialization are:

# \*Education 551N. Organization and Administration of Reading Programs 2 s.h.

This course is designed to acquaint the student with the more complex aspects of organizing and administering reading programs. It includes such topics as: theory and techniques of leadership, program development, organization of inservice programs, developing a budget, methods of evaluation, etc. In general, this course is aimed at providing essential background for reading specialists to establish or administer a functional secondary school reading program.

#### #Education 558. Field Experience in Reading

2 s.h.

The aim of the course is to introduce the student to various aspects of reading through experience in agencies actually dealing with such problems. Students observe and participate in activities of the agencies to which they are assigned and write full accounts of these observations and experiences. Prerequisites are: experience in teaching, familiarity with literature on all aspects of reading and psychology, Education 552, and permission of instructor. The hours for the conferences are arranged personally by student and instructor.

#### #Education 659. Research Seminar in Reading

2 s.h.

The course is designed to provide a laboratory situation for the exploration and study of problems in the field of reading that have been suggested by the educational events and trends of the year, by the interests and responsibilities of the members of the class, and by educational movements in New Jersey, the country, and the world. Each student will execute an individual research effort which he reports to the class.

\*Old Number but New Course #New Course

# DEPARTMENT OF HOME ECONOMICS

Graduate Advisor: DR. KATHARINE B. HALL

Graduate study in the Department of Home Economics is designed:

- To provide an opportunity for home economics teachers in the New Jersey public schools to further pursue their professional preparation in an effort to improve their teaching skills.
- To provide an opportunity for students to extend, intensify, and enrich their undergraduate program of general education in order that they may become better informed and more responsible citizens of a changing society.
- To assist students to acquire a more advanced and comprehensive grasp of the major problems, issues, and techniques of professional education.
- To encourage the spirit of scientific inquiry, and creative, original, and independent thought by providing training and experience in educational research.
- 5. To provide experiences designed to develop in students desirable personal and social qualities of democratic citizenship.
- To encourage a spirit of professionalism and assist the student to gain the necessary attributes for professional advancement.

#### REQUIREMENTS FOR THE M.A. DEGREE IN HOME ECONOMICS

# **Admission to Program**

Matriculation normally will require a Bachelor's degree in Home Economics from an accredited College or University.

I.	Ger	neral E	duca	tion (s	see Master's Degree Program Pattern)			6-12	s.h.
					lucation (see Master's Degree Program I				
		cializat						11-20	
111.	Spe	ciunzun	1071						
	A.	Core c	ours	es requ	uired of all candidates			7	s.h.
		Home	Ec.	603.	Research Seminar	3	s.h.		
		Home	Ec.	510.	Interdisciplinary Study of the Family	2	s.h.		
		Home	Ec.	511.					
					Home Economics	2	s.h.		
	D	Empha	cie i	n Suhi	ect Matter			4-10	s.h.
	ь.				edit from the following.			1 10	0.11.
					must be 500 numbered courses.				
					Dynamics of Family Interaction	2	e h		
					The Management of Family	_	3.11.		
		Home	LC.	230.	Resources	2	s.h.		
		Home	Ec.	540.					
					Family Sociology				
					The Disadvantaged Family				
					Consumer Economics				
		Home	Ec.	403A.	Problems in Management	2	s.h.		
		Home	Ec.	433.	Readings in Early Childhood				
					Education	2	s.h.		
	C.	Free E	lecti	ves				0-4	s.h.
		Home	Ec.	550.	New Findings in Nutrition	2	s.h.		
		Home	Ec.	531.	Housing the Family	2	s.h.		
		Home			Clothing and Human Behavior				
		Home			Tailoring	2	s.h.		
		Home	Ec.	420.	Teaching Family Living in the	_			
			_		Public High School				
		Home			Women in Contemporary Society	2	s.h.		
		Home	Ec.	431.	Teacher-Parent Relations in Early	2	- 1-		
		Home	Ea	126	Childhood Education	2	s.n.		
		Home	EC.	420.	Home Management in the Secondary School Curriculum	2	e h		
		Home	Fc	410					
	Co				artments related to Home Economics, su			appr	oval
bv s	radi	uate adv	visor	. may	be selected.		200 00	арри	
, 0	,			,					

#### IV. Comprehensive Examination

A comprehensive written-oral examination is required of all candidates for the Master's degree with the exception of those students who elect Graduate 600, Master's Thesis, in which the student earns four semester hours credit.

#### GRADUATE COURSES

#### Home Economics 510. Interdisciplinary Study of the Family 2 s.h.

To familiarize students with contributions which various academic disciplines (history, anthropology, biology, economics, as well as psychology and sociology) make towards a more comprehensive understanding of family life.

#### Home Economics 511. Contemporary Issues in Home Economics

A seminar dealing with timely issues in home economics with special emphasis on changes in society which affect the family. Attention is centered on problems of continuing concern.

#### Home Economics 520. Dynamics of Family Interaction

2 s.h.

A critical review of concepts and theories, both psychological and sociological, which are currently used in understanding patterns and problems of family relationships.

#### Home Economics 530. Management of Family Resources

2 s.h.

A study of the family as a decision-making unit directing its resources for more effective living. Philosophical, psychological, sociological and economic trends which have a direct influence on the family's ability to maximize its resource potential and utilization are included.

#### Home Economics 531. Housing and the Family

2 s.h.

A study of the principles of family housing; analysis of location, structure, design, furnishings, and equipment as a setting for the physical and emotional development of the individual and the family.

#### Home Economics 540. Child in the Family

2 s.h.

An intensive study of the theories and research related to child rearing technique including a critical analysis of factors influencing parental practices and their effects on the child.

#### Home Economics 550. New Findings in Nutrition

2 s.h.

Recent developments in nutrition and a critical review of fundamentals. Prerequisite: Nutrition 306 or equivalent.

#### Home Economics 560. Clothing

2 s.h.

An intensive study related to analysis of factors affecting appearance and satisfaction in clothing. The economic, sociological, and psychological aspects of clothing are studied in relation to the individual.

#### Home Economics 603. Advanced Studies in Home Economics

3 s.h.

Library or experimental research on specific problems of limited scope. Work may be taken in the following areas: (a) child and family (b) family and consumption economics (c) family housing (d) foods (e) nutrition (f) textiles and clothing. Prerequisite: Educ. 503.

#### SENIOR-GRADUATE COURSES

#### Home Economics 403A. Problems of Management

2 s.h.

This course is an analysis of personal and family activity and resources with special emphasis on variations among socio-economic groups. Specific study will be made of the following: problem clusters; value intensification and rank-ordering, commitment; spending patterns, work patterns, community, family and personal resources; internal and external influences on problem solving and creation. Experience is included to acquaint students with the management problems of families with different backgrounds from their home situation.

#### Home Economics 406. Tailoring

2 s.h.

Fundamental processes and procedures for constructing tailored garments, and the differences between dressmaking and tailoring techniques, are emphasized. A comparison is made between factory-made garments and custom tailoring.

#### Home Economics 407. Consumer Economics

3 s.h.

This course is designed for study of the allocation of resources used by families to acquire meaningful living. Content includes: the sociological, psychological, and economic factors which influence American families' consumption patterns; spending plans; financial protection and security; credit; savings and investments; marketing systems and conditions; motivations as an economic unit functioning in the economic system.

#### Home Economics 410. Experimental Foods

3 s.h.

This is a comparative approach to methods of food preparation with emphasis on newer techniques. Each student does experimental laboratory work on selected phases of food preparation.

#### Home Economics 426. Home Management in the Secondary School Curriculum

2 s.h.

The purpose of this course is to integrate the understandings and knowledge of home economics with the theory and practices of management. Study includes factors affecting decision making and the use of family resources with emphasis on how these concepts can be incorporated into home economics courses, materials, methods, and course developments for teaching home management.

#### Home Economics 427. The Disadvantaged Family

2 s.h.

This course is a study of families with various kinds of disadvantages: social, economic, educational, physical, and cultural. Of primary importance, however, are families from lower socio-economic and minority groups. Cause and effect factors, community agencies, and curriculum development are some of the areas of study leading to understanding children from these backgrounds and orienting subject matter to their needs. Provision for individual, personal experiences will be part of the study.

#### Home Economics 429. Family Sociology

3 s.h.

This course concentrates on analyzing, comparing, and organizing various viewpoints and studies of family patterns around the world, through history and among different socio-economic groups. An underlying theme is the influence of rapid social change on the stability of the family and of family-biased values.

### Home Economics 431. Teacher-Parent Relations in Early Childhood Education

2 s.h.

Techniques for organizing parent programs and meetings are presented. Topics included are program planning, use of consultation and community resources, and special methods and procedures for working with parents individually and in groups.

#### Home Economics 432. Women in Contemporary Society

2 s.h.

A study of the roles played by the modern American woman, her education, ambiguities, and dilemmas. Study includes trends, developments and accomplishments of women, educational needs, social and economical contributions to the family and culture, and the resolution of professional, personal and family needs, interests, and responsibilities.

#### Home Economics 433. Readings in Early Childhood Education 2 s.h.

Analysis of important research, studies and literature pertaining to the education of pre-school children. Recent developments in the field of early childhood education arising out of such programs as Head Start, Montessori schools, and Summerhill are examined and related to existing theories of early childhood education.



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GRADUATE DIVISION

MONTCLAIR STATE COLLEGE Upper Montclair, N. J.

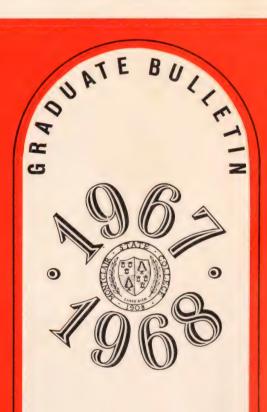
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# STATE COLLEGE



UPPER MONTCLAIR, NEW JERSEY

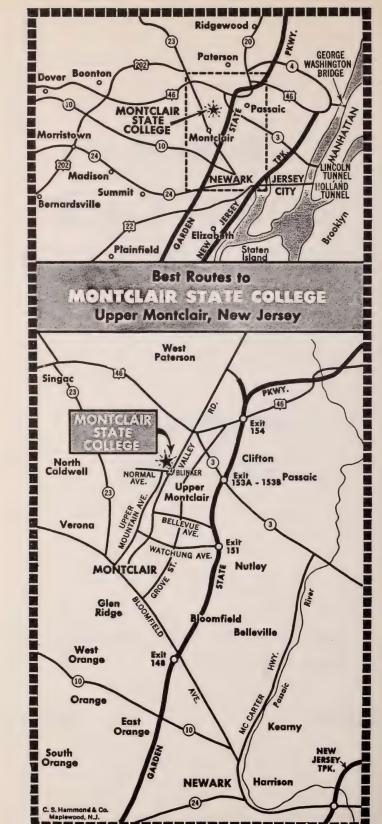


## Bulletin of

## MONTCLAIR STATE COLLEGE

Graduate Division 1967-1968

MONTCLAIR STATE COLLEGE UPPER MONTCLAIR, N. J. 1967



#### HOW TO GET TO MONTCLAIR STATE COLLEGE

#### Location

Montclair State College is located on Valley Road and Normal Avenue, Upper Montclair (turn at the blinker). The College is one mile south of the junction of Routes 3 and 46 on Valley Road.

#### Directions for Reaching the College

From Bloomfield Avenue, Montclair Center (Sears' store) proceed north on Valley Road—three miles to the Normal Avenue blinker.

From Route 46 East, the landmark is West's Diner; take the next right, Valley Road—one mile to blinker at Normal Avenue.

From Route 46 West, the landmark is the junction with Route 3. Turn on Valley Road to Montclair, bear right on cloverleaf and proceed south under Route 46—one mile to blinker at Normal Avenue.

From the *Turnpike North* of Exit 10 or *South* from George Washington Bridge turn at Route 3 West or Route 46 West, then as above. From the *Turnpike South* of Exit 10, leave the Turnpike at Exit 10 and follow directions for Garden State Parkway North.

From Garden State Parkway North turn left at Exit 153B and proceed West on Route 3 to Valley Road.

From Garden State Parkway South turn at Route 46 West (Clifton Exit 154) thence to Valley Road. If you miss that turn, continue South to Exit 151, Watchung Avenue, thence West to Valley Road and North to blinker at Normal Avenue.

The #60 Public Service Bus from Newark to Montclair terminates at the South end of the campus.

The #76 Public Service Bus from Paterson to Orange stops at Valley Road and Normal Avenue.

The #66 DeCamp Bus from New York, which leaves on the half hour from Platform 73, Port Authority Bus Terminal, stops at Valley Road and Mt. Hebron Road—one long block from the campus.

The Erie Railroad, Montclair Heights Station, is at the Southwest corner of the campus.

WHEN IN DOUBT

Call

746-9500-Area Code 201

#### FOR INFORMATION ABOUT:

Write to:

General Policies and Program Dr. Thomas H. Richardson President
Instructional Program and Policies
Student Personnel Services, Scholarships and Loans, Dormitories Mr. Lawton W. Blanton, Dean of Students
Admission to Graduate Program Dr. Joseph F. Becker Acting Associate Dean—Graduate
Admission to Undergraduate Division
Evening Graduate and Undergraduate Division and Summer Session
Certification and Evaluation, Teacher Certificates Miss M. Patricia Fries Miss Simone Picard Counselor and Certification Advisors, Evening Division
Business and Financial Matters Mr. Vincent B. Calabrese Director, Business Services
Student Teaching and Placement
Transcripts and Records Mr. Robert Foley Office of Registration
Alumni Affairs Mrs. Helen Z. Rendall Alumni Secretary
Public Information Mrs. Mary McKnight Coordinator of Public Information

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#### MONTCLAIR STATE COLLEGE

#### **CALENDAR 1967-68**

#### GRADUATE

September 9, 11, 12 Registration—Fall Semester

September 14 Evening and Graduate Classes Begin

November 9, 10, 11 Faculty Institute, No Classes

November 15 Last day to file for June, 1968, M.A.

Degree conferment

November 22 to 27 Thanksgiving Recess

December 16, 1967 to

January 2, 1968 Christmas Recess

January 27, 29, 30 Registration—Spring Semester

February 5 Evening and Graduate Classes Begin

March 15 Last day to file for September 1968,

M.A. Degree evaluation

March 13, 16 Comprehensive Examinations

April 6 to 16 Spring Recess

May 27 Evening and Graduate Classes End

June 2 Baccalaureate and Convocation

June 5 Commencement

#### Periods for Filing Applications for Matriculation

Fall, 1967 or Spring 1968, Admission-June 19 through July 19, 1967

Spring, 1968, or Summer 1968, Admission—September 25 through December 18, 1967

Summer, 1968, or Fall 1968, Admission—February 3 through April 8, 1968

Fall, 1968, or Spring 1969, Admission—June 15 through July 15, 1968

#### STATE BOARD OF HIGHER EDUCATION

EDWARD E. BOOHER, Chairman	Cranbury
DR, WILLIAM O, BAKER	Madison
Charles J. Brower	Brielle
JOHN T. CONNOR	Morristown
C. Douglas Dillon	Bedminster
Mrs. John H. Ford	Cresskill
DONALD C. LUCE	Plainfield
DR, WILLIAM H. MCLEAN	Shorthills
JOHN M. SEABROOK	Salem
GEORGE F. SMITH	Metuchen
Mrs. Deborah Cannon Wolfe	Cranford
RALPH A. DUNGAN (ex officio)	Princeton
Dr. Carl L. Marburger (ex officio)	Trenton

**Chancellor of Higher Education** 

RALPH DUNGAN

## ADMINISTRATIVE OFFICERS

Thomas H. Richardson, Ed.D	President
Allan Morehead, Ed.D.	Dean of the College
Lawton W. Blanton, M.A.	Dean of Students
Vincent B. Calabrese, M.Ed	Director, Business Services
Anthony R. Kuolt, M.Ed.	Assistant to the President
Edward J. Ambry, Ph.D. (on loan	n) Associate Dean, Graduate
Joseph F. Becker, Ed.D.	Acting Associate Dean, Graduate
Laurence Bellagamba, Ed.D.	Associate Dean, Undergraduate
Peter P. Stapay, M.Ed.	
Robert E. Mac Vane, M.Ed.	Director, Evening Division
Marshall Butler, M.A.	Assistant Director, Evening Division
Norman E. Lange, Ed.D.	Director, Student Teaching & Placement
Maxine R. Bullard, B.A.	Recorder
M. Patricia Fries, M.A.	Counselor, Evening Division
Simone C. Picard, M.A.	Counselor, Evening Division
John R. Beard, D.L.S	Head Librarian
	fall semester) Chairman, Department of English
	Acting Chairman, Department of English
	Chairman, Department of Psychology
Lillian C. Calcia, Ed.D.	Chairman, Department of Fine Arts
Paul Clifford, A.M.	Chairman, Department of Mathematics
Philip S. Cohen, Ph.D.	Chairman, Department of Social Studies
	Chairman, Department of Industrial Education and Technology
L. Howard Fox, Ph.D.	Chairman, Department of Speech
M. Herbert Freeman, Ph.D.	Chairman, Department of Business Education
<u> </u>	Chairman, Department of Foreign Languages
Irwin A. Gawley, Ed.D.	Chairman, Department of Science
Katharine B. Hall, Ph.D.	Chairman, Department of Home Economics
· · · · · · · · · · · · · · · · · · ·	Chairman, Department of Music
Richard C. Tews, Ph.D.	Chairman, Department of
Ralph Walter, Ed.D	Health & Physical Education Chairman, Department of Education

#### GRADUATE COUNCIL

#### Joseph F. Becker, Chairman

Paul Clifford	James Pettegrove	John R. Beard, ex officio
Earl C. Davis	Bertha Quintana	Robert MacVane,
L. Howard Fox	John G. Redd	ex officio
Carl E. Frankson	Louis Roederer	Allan Morehead,
Katharine B. Hall	Ralph Walter	ex officio
Herbert J. Hauer	Foster Wygant	Simone Picard,
Dorothy Morse		ex officio
Louis C. Nanassy	Edward J. Ambry,	Thomas H. Richardson,
Earl Peckham	ex officio	ex officio

#### LIBRARY SERVICES

John R. Beard, D.L.S.	Head Librarian
Ruth Beach, B.L.S.	Acquisitions Librarian
Patricia E. Duane, M.L.S.	Catalog Librarian
Elsie Gibson, M.L.S.	orary Science Co-ordinator
Gertrude T. Greenberg, M.L.S.	Serials Librarian
Blanche W. Haller, B.S. in L.S.	Catalog Librarian
Selma Harris, M.L.S.	Reference Librarian
Mary Hellman, M.L.S.	Reference Librarian
Doris W. Rockman, M.S.	Reference Librarian
Marian Siegeltuch, M.L.S.	Reference Librarian
Dorothy Walter, M.S.	Librarian, College High

#### AUDIO VISUAL AIDS

Emma Fant	tone, A.M.		Audio-Visual	Education
Thaddeus J.	Sheft, A.I	<b>1</b>	Audio-Visual	Education

#### **FACULTY OF THE GRADUATE DIVISION**

#### FACULTY OF THE GRADUATE DIVISION (Continued)

Paul A. Gaeng, Ph.D.	Chairman and Associate Professor of Foreign Languages
Vladimir I. Garik Ph.D	Associate Professor of Chemistry
Dorothy Garland, M.A.	Associate Professor of Psychology
	Chairman and Professor of Science
Abraham Gelfond, Ph.D.	Professor of Psychology
	Professor of Education
· · · · · · · · · · · · · · · · · · ·	Professor of Business Education
	e Professor of Psychology and Education
	e Professor of Psychology and Education
	Professor of Psychology
	Professor of Distributive Education
	Associate Professor of Political Science
	Associate Professor of Fine Arts
	Associate Professor of Speech
	Associate Professor of Education
Helene Klibbe, Ph.D.	Assistant Professor of French
Walter E. Kops, A.M.	Associate Professor of History
	and Social Studies Education
	Associate Professor of Science
	Professor of English
	Professor of Economics and Director of N.J. Center for Economic Education
	Associate Professor of Psychology
	Professor of Biology
Gerhard Lang, Ph.D.	Associate Professor of Psychology
Charles L. Leavitt, Ph.D.	Associate Professor of English
_	Professor of Speech
Charlotte R. Lockwood, M.A.	Associate Professor of Fine Arts
Evan M. Maletsky, Ph.D.	Professor of Mathematics
Samson McDowell, Ph.D.	Professor of Biology
	Professor of Speech
	Associate Professor of Psychology
	Associate Professor of Education
	Associate Professor of Physics
Ward Moore, Ph.D.	Chairman and Professor of Music
	Associate Professor of History
	Professor of Music
	Professor of Education
	Professor of Business Education
	Professor of Education
James P. Pettegrove, A.M.	Acting Chairman and Professor of English

#### FACULTY OF THE GRADUATE DIVISION (Continued)

George E. Placek, A.M.	Associate Professor of Chemistry
Sara Prieto, Ph.D.	Assistant Professor of Spanish
Bertha B. Quintana, Ed.D.	Professor of Anthropology
John G. Redd, Ph.D.	Professor of Health and Physical Education
Maynard L. Rich, M.S.	Associate Professor of Psychology
Eloisa Rivera-Rivera, Ph.D.	Associate Professor of Spanish
John P. Roberts, A.M.	
Louis J. Roederer, M.A.	Associate Professor of Foreign Languages
Helen E. Royer, Ph.D.	Associate Professor of History
Charity Eva Runden, Ph.D.	Professor of Psychology and Education
Jack Sacher, Ed.D.	Assistant Professor of Music
George E. Salt, A.M.	Associate Professor of Education
Harold M. Scholl, Ed.D	Professor of Speech
Jerome M. Seidman, Ph.D.	Professor of Psychology and Education
Abbie F. Shapiro, Ed.D	Associate Professor of Psychology
Horace J. Sheppard, A.M.	Associate Professor of Education
Max A. Sobel, Ph.D.	Professor of Mathematics
Enid M. Standring, Ph.D.	Assistant Professor of French
Lillian Szklarcyzk, Ph.D	Associate Professor of French
Richard W. Tews, Ph.D.	Chairman and Professor of Physical Education
Ralph A. Vernacchia, A.M.	
Hazel M. Wacker, Ed.D	Professor of Health and Physical Education
Ralph Walter, Ed.D.	Chairman and Professor of Psychology and Education
Benjamin Wilkes, M.S.	Associate Professor of Music
Vernon Williams, A.M.	Associate Professor of Mathematics
	Assistant Professor of Psychology
Foster Wygant, Ed.D.	Associate Professor of Fine Arts
	Professor of English and Education
Louis E. Zerbe, M. Mus.	Associate Professor of Music

#### GENERAL INFORMATION

#### History and Development of the Graduate Division

In 1908 Montclair State College began its teacher-education program as a two-year normal school. In 1927, by action of the State Board of Education, it was changed to a State Teacher College with four-year curricula leading to a Bachelor of Arts degree and certification to teach in the secondary schools of the State. Extension courses were instituted in 1929, and summer sessions in 1930, to enable teachers who held only a diploma and a teacher's certificate to obtain a Bachelor's degree.

On July 1, 1958, by action of the State Board of Education, the name of the College was changed to Montclair State College. Its function, however, continued to be that of a professional school devoted primarily to serving the interests of secondary education in this state until July 1, 1966, when the College became multi-purpose.

The State Board of Education authorized, in June, 1932, the establishment of appropriate graduate programs leading to the Master of Arts degree, which the College was empowered to grant. Graduate studies were first offered in the summer of 1932 and have been continued in all regular and summer sessions since that time.

In 1937, the Middle States Association reviewed and accredited the graduate program and has since done so regularly, as has the American Association of Colleges for Teacher Education, whose function has been assumed by the National Council for the Accreditation of Teacher Education. In 1948, the Graduate Committee was formed as a sub-committee of the Administrative Council to coordinate the graduate work of the various departments participating in it and to establish policies and standards appropriate to Master's degree programs. Since 1956, this Committee, under the title of Graduate Council, has assumed greater responsibility for the conduct of graduate work. On July 1, 1967 control of the College was relinquished by the State Board of Education. A newly established Board of Higher Education was assigned the responsibility for planning and coordinating higher education in the State of New Jersey.

The last decade has witnessed a rapid but orderly expansion of the entire College. The construction of additional modern physical facilities and the establishment of new and appropriate degree programs, have kept pace with both the increasing student enrollment and the educational needs of New Jersey.

Currently there are more than 2,500 students registered in the various courses of this division, with approximately 1,200 students matriculated in twenty different programs leading to the Master of Arts degree.

#### Professional and Academic Status of the College

#### ACCREDITATION AND MEMBERSHIPS

Montclair State College is a fully accredited member of the Middle States Association of Colleges and Secondary Schools. In addition, the National Council for the Accreditation of Teacher Education has granted it full accreditation for the preparation of elementary and secondary school teachers, and school service personnel, with the Master's degree as the highest degree approved. Credits are exchangeable among colleges and universities which are members of regional and national associations to the extent to which the degree requirements of individual institutions permit the acceptance of transfer credit.

The College holds memberships in the American Association of Colleges for Teacher Education, the American Council on Education, The Association of State Colleges and Universities, and the New Jersey Association of Colleges and Universities, Female graduates of the College are accepted for membership in the American Association of University Women.

#### The College Library

The air-conditioned Harry A. Sprague Library was opened in the Fall of 1963. Its three floors were planned to accommodate 800 students and a book collection of 150,000 volumes. Faculty carrels, individual study desks, typing areas, and conference rooms were also provided. School textbooks and courses of study for elementary and secondary school subjects were housed in a Curriculum Laboratory.

#### Master's Degree Specialization Areas

In addition to the major in Teaching, graduate work is offered in the following major areas: Administration and Supervision, Business Education, Distributive Education, English, Fine Arts, Foreign Languages (French and Spanish), Health Education, Home Economics, Industrial Education and Technology, Mathematics, Music, Outdoor Education and Conservation, Physical Education, Psychology, Pure and Applied Mathematics, Reading, Science, Social Sciences, Speech Arts, Speech Therapy, and Student Personnel Services, including School Social Work (Visiting Teacher).

#### The Administration of the Master's Degree Programs

In the organization of the College, the Graduate Council is the faculty group which advises in the proper functioning of the Master's degree curricula. Its membership consists of those administrative offi-

cials of the College closely associated with graduate studies who are ex-officio, together with others who represent the various departments offering Master's degree programs. Departmental representatives on the Council are appointed by the President of the College, upon the recommendation of the Dean of the College and the department chairmen.

The Council's chief function is to recommend basic standards, policies, and procedures which govern the granting of Master's degrees, to develop new programs, and to engage in a continuous evaluation of all Master's degree work.

Graduate program policies and procedures are administered by the Associate Dean for Graduate Studies in cooperation with the various Master's degree program advisors and the Dean of the College, who supervises the activities of the Graduate Division and is responsible to the President of the College.

#### Faculty

Faculty members serving the Graduate Division are with few exceptions members of the full-time staff of the College. Those who have attained the rank of associate professor or higher, or have an earned doctorate, are eligible for appointment to the faculty of the Graduate Division. The faculty of the Graduate Division is not restricted to advanced instruction. Graduate courses may constitute only a part of the regular schedule of the faculty of the Graduate Division.

#### **Graduate Students**

The courses are organized to serve the interests of five specific groups of students:

- Group I Those who wish to matriculate for the degree of Master of Arts: teachers-in-service, as well as those interested in personal and professional growth who hold a Bachelor's degree from an accredited college or university, have a high scholastic average, and are fully certified New Jersey teachers.
- Group II Those who wish to matriculate for the degree of Master of Arts in Teaching: students who hold a Bachelor's degree, have a high scholastic average, and plan to pursue certification to teach in New Jersey secondary schools or in certain special subject fields.
- Group III Those who do *not* wish to matriculate for the degree of Master of Arts: students who hold graduate degrees and

wish to continue their professional preparation, college graduates who wish to take courses leading toward secondary school certification, students who are matriculated for advanced degrees in other colleges and who plan to transfer their credits, and special students taking courses for cultural purposes without reference to credit.

- Group IV Those who wish to matriculate for the Master of Arts Degree in Psychology or Pure and Applied Mathematics: students who hold a Bachelor's degree from an accredited college or university, have a high scholastic average, and plan to continue their education within either of these fields.
- Group V Senior-graduate students (Montclair State College seniors only) who are currently enrolled in the College who have good academic records (2.67 or better) and who are within sixteen semester hours of graduation may be permitted to take a maximum of eight semester hours of seniorgraduate work (courses numbered 400-499) concurrently with any remaining semester hours to meet the requirements of the Bachelor's degree and prior to graduation. Applicants should obtain the appropriate application form from the Graduate Office. These applications are then presented to the Registrar, the chairman of the department concerned, and the Associate Deans. Students should then register for this special work in the office of the Director of the Evening Division. This does not constitute application for the Master's degree.

#### Admission and Matriculation for the Master's Degree

- 1. The applicant for admission to any of the Master's degree programs should be a graduate of an accredited college or university and must present evidence of his qualifications for advanced study as shown by a high scholastic record. The College requires an applicant with a doubtful undergraduate record or a Bachelor's degree from a non-accredited institution to take the Graduate Record Examination to determine his acceptability for matriculation in the Master's degree programs.
- 2. It is in the student's own interest that he determine his eligibility for matriculation before initiating a program of graduate study. However, his formal matriculation (i.e., official acceptance in writing by the Graduate Office in a program leading to the Master's degree) may be deferred for good reason until no more than eight semester hours of graduate credit have been earned.

- 3. Prior to admission and matriculation, each student indicates the Master's degree area in which he will complete such courses as are prescribed. Upon his formal acceptance, an official work program is made out in conference with a departmental advisor appointed for this purpose.
- 4. To be eligible for matriculation in a major subject area, a student must present evidence, in the form of an official undergraduate transcript, of work in the undergraduate major as indicated in the departmental statements describing the various programs.
- 5. To be eligible for matriculation in the several professional education programs in the Department of Education, except the major in Teaching, it is required that a student be certified to teach in New Jersey and have some successful teaching experience. Two full years of experience in grades 7-12 are required for acceptance into the program in Administration and Supervision, and one full year of teaching is required for acceptance into the Student Personnel Service major. One year of social work may be substituted in the School Social Work program of the Student Personnel Services.
- 6. To be eligible for matriculation in the Department of Psychology no teaching experience is necessary. However, for certification as a school psychologist one year of teaching experience and a New Jersey teacher's certificate is required.

#### Steps in the Matriculation Process

- 1. The applicant secures from the Graduate Office an application form which must be completed and returned to that office together with a) a personal statement of his objectives as required on the application form; b) a check or money order for the required application fee; and c) a photocopy of his teaching certificate where applicable.
- 2. The applicant will have his college send official transcripts of all college credits (if the applicant is not a graduate of Montclair) to the Associate Dean/Graduate. The completed application, fee, and official transcripts should be on file in the Graduate Office before the dates listed on the College Calendar. (See page 6)
- 3. A review of the student's undergraduate record and other qualifications will be made in the Graduate Office. The applicant will then be notified as to what action has been taken on his application.
- 4. The applicant who meets admission requirements will next confer with the graduate advisor in the program in which he expects to do his work. When he is eligible for matriculation, the advisor will develop a formal program of courses with him.
- 5. A final conference with the Associate Dean/Graduate may be arranged, if necessary. Following this, the applicant will be advised in writing of the decision of the Graduate Council, and, if accepted,

- he will be furnished with a statement of the course of study (Official Workprogram) to be completed within a six-year period.
- 6. A final recommendation on all applicants is made by the Graduate Council. For good reason, legitimate adjustments may be made at any time in the student's original program, with the approval of his program advisor and confirmation of this action by the Associate Dean/Graduate. (Amendments of this nature are made on an appropriate form available in the Graduate Office.)

#### Types of Admission in the Degree Programs

- 1. Regular admission for applicants eligible to be fully matriculated.
- 2. Conditional (granted because specific undergraduate course deficiencies exist, or for other reasons).

#### Procedure for the Admission of Veterans

Veterans seeking admission to the Graduate Division should apply well in advance of the registration dates for a certificate of eligibility and entitlement at the Newark, New Jersey office (20 Washington Place) of the Veterans Administration. In requesting this certificate, the veteran is advised to indicate clearly his educational objective. The Veterans Administration has established certain limitations, especially with regard to change of course. In order that a veteran may be assured that his certificate is in order and that he has taken the proper steps to expedite his training, under the G. I. Bill, he should report at registration time to the Veterans' Counselor whose office is located in College Hall.

## Master's Degree Program Pattern (all majors except Education, Psychology, and Pure and Applied Mathematics)\*

The curriculum pattern for each of the Master's degree programs includes experiences in three areas: 1) Basic professional education; 2) general education; and 3) subject matter specialization.

I. General Education—Requirements for the Master's Degree insure that students undertake some broadening experience which will extend their studies outside of their speciality and even their profession. These graduate general education courses, to be chosen under careful guidance in accordance with the student's background, are designed to show the interrelationships of the major fields of learning. Courses selected must be outside the student's undergraduate major, graduate major, and the Education Department.

General Education Requirement: minimum 6 credits; maximum 12 credits.

II. Basic Professional Education—This portion of the graduate program is devoted to developing the general professional consciousness as well as the competence of each student. This is accomplished by studies necessary for all teachers—regardless of their field of specialization—relating to the profession as a whole as it relates to children and the society in which it functions. Students must select courses from the following list to satisfy the Basic Professional Education requirement.

Required of all M.A. candidates:

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Ed.	580	Principles of Guidance, or	. 2	s.h.
Ed.	451	Guidance for the Classroom Teacher	. 3	s.h.

Basic Professional Education Requirement: minimum 6 credits; maximum, 9 credits.

III. Specialization—A considerable portion of the graduate program is devoted to increasing the student's competence as a teacher. Studies in this category include additional work in the content of his major and related fields, and in the utilization of this content in the public school curriculum.

It is important that each student have experience in the systematic acquisition, preparation, and analysis of information relevant to some problem in his field of specialization. The candidate is required to show competence in executing and reporting an independent research study, field experiment, master's thesis, or similar creative activity. Opportunity for this activity is provided in the specialization aspect of the student's program.

The student may choose to satisfy this requirement in one of two ways:

- 1. A written report of superior quality of an approved study or equivalent creative production—in connection with one of the seminars in his program. The project will be directly related to the purposes of the program in which the student is enrolled, or
- 2. A formal research thesis carried on under the direction of a thesis advisor. Students wishing to complete a formal thesis will register and may earn four semester hours of credit for this activity.

Specialization Requirement: minimum, 11 credits; maximum, 20 credits.

TOTAL MASTER OF ARTS Minimum: 32 s.h.

#### Graduate Research and the Master's Thesis

Courses and seminars will introduce the student to research methods in the several disciplines and indicate what and where are the basic sources of information. They will require him to survey the professional literature of his major. An advanced study, essay, research report is required in all the Master's degree programs by means of the departments' seminars.

Creative work, or distinguished performance involving intellectual as well as technical mastery, may be substituted in the programs in the arts, music, or literature. The essential element in this type of

experience is independent work in depth by the student. Whether or not it is carried out in connection with course requirements is immaterial if the investigation conducted under faculty supervision requires the student to work independently on his own and to demonstrate his capacity to find, assess, organize, treat, and interpret the materials in a scholarly manner.

#### The Master's Thesis

A department may accept The Master's Thesis as equivalent to the required seminar, and/or in lieu of all or part of the final comprehensive examination. A student writing a thesis must receive the approval of his departmental advisor and the Associate Dean/Graduate, and must register for the course, Departmental 600, Master's Thesis, for four semester hours. Information which will aid students submitting a Master's thesis is available in the Graduate Office.

The student is expected to complete the thesis within one calendar year. An extension of time may be granted by the Associate Dean/Graduate, after consultation with the student's advisor. If granted, the student must re-register for Departmental 600 on a no-credit basis and pay a fee for two semester hours. This extension will be for six calendar months. The thesis must be submitted six weeks prior to commencement.

#### **Certification Students**

Students holding Bachelor's degrees from the other colleges who plan to take courses leading to certification for secondary school teaching should:

- 1. Follow the procedure outlined under the section SPECIAL PROGRAMS WITH A MAJOR IN TEACHING.
- Direct questions regarding certification to the Certification Advisor at the College; pre-registration advisement, by appointment, is recommended.
- Consult Evening Division and Summer Session announcements for further information.

#### Certification and the Master's Degree (all majors except Teaching, Pure and Applied Mathematics, Psychology, and School Social Worker Program)

Students holding Bachelor's degrees from other colleges must be fully certified to teach in the area of their major specialization. Students should have completed their supervised student teaching or have had one year of successful teaching experience under provisional certification before they can matriculate for the Master's degree (including Education 595E and F)

Students who are interested in correlating their work for certification with some work toward the Master's degree should arrange an advisement interview with the College Certification Advisor.

#### **Certification Students and Student Teaching**

Graduates of other colleges who wish to do their student teaching through Montclair State College should obtain a statement from the Director of Student Teaching and Placement outlining the conditions under which it can be done. This group will be expected to meet the standards established for Montclair State College students before being assigned for student teaching.

Students who desire to meet the State requirement in supervised student teaching must be approved by the Director of Student Teaching, after which approval they will register for this course.

#### Special Programs with a Major in Teaching

These Certificate and Master's degree programs are designed especially for college graduates who wish to prepare to become secondary school teachers, or teachers of subjects such as art and music in the elementary and secondary grades. The content, organization, materials, and methods of these courses are designed with the consideration of the student's maturity, academic background, and experience.

#### Admission to Certificate\* or Master's Degree in Teaching Programs

Admission is restricted to those selected graduates of accredited colleges who indicate high potential for teaching, and to in-service teachers with emergency or provisional certificates.

College graduates not employed as teachers will be screened for admission with due consideration to:

- a. Suitability or character and personality for teaching
- b. Health examination
- c. Speech and writing competence
- d. Competence in teaching field, based upon undergraduate grades of B- or better (2.67 on a 4 point scale). Students who present lower grade point averages must also present scores earned on the Graduate Record Examination Aptitude Test.

In-service teachers holding emergency or provisional certificates, employed by local school districts, will be admitted to the program upon application, and agreement by the employing superintendent of schools to enter into a cooperative program of supervision of the student

<sup>\*</sup>Students who successfully complete the Certificate Program will be recommended for appropriate New Jersey teacher certificates.

in connection with course Education 595E, 595F Supervised Teaching Seminar. During the first semester these students will complete the application procedure regarding character, health, speech, and writing, and preparation in subject-matter field. When the student completes six to ten semester hours work at Montclair, a decision will be made regarding matriculation for the M.A. degree. If as a result of failure to satisfy the screening criteria or unsatisfactory performance in the program, it is considered necessary to withdraw a student, conferences will be arranged with the student and the employing superintendent as early as possible.

MASTER'S DEGREE PATTERN: MAJOR IN TEACHING SECONDARY (7-12) AND SPECIAL FIELD (K-12)

#### (1) Basic Background Requirements

A student must have had a minimum of thirty graduate or undergraduate semester-hour credits in general background courses distributed in at least three of the following fields: English, Social Science, Science, Fine Arts, Mathematics, and Foreign Languages. Six semester-hour credits in English and six semester-hour credits in Social Studies will be required.

#### (2) Subject-Matter Specialization Requirements

A student must have had a subject-matter background suitable in extent and coverage to constitute a teaching major in at least one field. Students whose subject-matter background is deficient will be required to remove the deficiencies prior to recommendation by the College for a teacher's certificate or Master's degree. Additional work that is needed may be taken at either the graduate or undergraduate level. Write to the Associate Dean/Graduate.

#### (3) Professional Requirements

Students take the following courses (course descriptions and details may be found in the Education and Psychology Department sections of this catalog): Education 595A, 595B, 595C, 595D, 403 or 595E and 595F; Psychology 560, 561, 564, 565 or 566. Courses may be waived that have been completed at either the graduate or undergraduate level prior to enrollment in the program. However, no student will be recommended for a certificate or a Master's degree who has not completed Student Teaching or the Supervised Teaching Seminar at the College.

TOTAL PROFESSIONAL PROGRAM FOR CERTIFICATION 26 s.h.

#### (4) Additional Courses for M.A. Degree

Required Courses

Education 595G and 595H 6 s.h.

Elective Courses 8 s.h.

Students may choose, with advisement, additional electives in general education or in the subject-matter specialization requirement.

Selected matriculated students may be invited to develop a Master's thesis under the guidance of a thesis advisor for which four semester hours of elective credit will be allowed.

TOTAL MASTER OF ARTS (Major in Teaching) ...... Minimum: 40 s.h. (Students must complete at least 32 semester hours of graduate work in the Montclair State College Program)

#### Requirements, Policies, and Procedures

Questions pertaining to any of the following should be addressed to the Associate Dean/Graduate.

#### (1) Application for Final Evaluation

The application form is obtained in the Evening Division Office by the degree candidate anticipating the completion of the degree requirements. This form must be completed and returned before:

March 15 for students completing requirements by the following August.

November 15 for students completing requirements by the following June.

#### (2) Attendance at Commencement

Following completion of requirements for the degree attendance is required at the June commencement unless excused by the Dean of the College.

#### (3) Basic Professional Education

Education 503, Methods and Instruments of Research, when required in the program, must be taken at Montclair State College. The Major in Teaching program requires a three semester-hour research course, Education 595G, "Action" Research for Teachers, and must be taken in residence.

#### (4) Certification Evidence

To receive final approval by the Registrar as a candidate for the degree in all programs except Pure and Applied Mathematics, Psychology, and School Social Work, the student must have evidence in his official file in the Graduate Office to indicate that he has met the certification requirements for the program for which he was matriculated. This evidence may consist of either a photocopy of the essential certificate to teach, or a letter of eligibility.

# (5) Change of Courses

No student will be permitted to change his scheduled courses without the approval of his advisor and the Associate Dean/Graduate. Such changes must be made prior to the second meeting of the course. To change from "auditor" to "credit," or vice versa, a student must make formal application not later than the mid-point in the semester. Forms are available in the Evening Division Office.

# (6) Comprehensive Examination

A comprehensive departmental examination or its equivalent is required in all departments. This examination may be written and/or oral. The oral phase of the examination will be on an individual basis. The examination is given during the Spring semester, prior to graduation, by the department in which the student does his major work. Students who fail the departmental comprehensive examination are permitted to retake this examination after a period of one year has elapsed. Students may be required to register for additional work in preparation for the re-examination. Students may not take the examination more than three times. (Consult the Evening Division Announcements for dates on calendar page. .) It is the student's responsibility to notify his advisor that he intends to take the examination. This procedure should be completed at least 6 weeks prior to the examination date in order to allow ample time for the department to communicate with each candidate concerning any pre-examination procedures.

# (7) Course Numbering System

Courses in the 500 and 600 series are open only to graduate students. Those in the 400-499 series and listed in this bulletin may be selected by graduate students for graduate credit. Students must have completed the prerequisites indicated in the course descriptions.

# (8) Course Offerings and Schedules

Regular bulletins are published for the information of those who wish to attend part-time, extension, or summer session courses. These contain a list of course-offerings, time of class meetings, room assignments, and instructors for the scheduled classes. Other information may be obtained from the Associate Dean/Graduate, Montclair State College, Upper Montclair, New Jersey.

# (9) Departmental Seminar

Each candidate must complete an approved seminar in the department of his major subject. Education 503, *Methods and Instruments of Research*, is a prerequisite for this required seminar.

# (10) Fees and Charges

**Tuition** 

New Jersey Residents	
and Teachers per semester hour of credit	\$16.00
Non-Residents per semester hour of credit	\$18.00
Service Charge per semester hour of credit	.50
Registration (non-refundable)	2.00
Late Registration (non-refundable)	5.00
Application for admission to a program	
(non-refundable)	5.00
Transcript (Inquire in Registrar's Office) each copy	1.00
Supervised Student Teaching (if required)	60.00
(This fee is in addition to the credit fees stated above)	
Dormitory (including room, breakfast, lunch, and dinner	
for a summer session) per week	22.75
All checks should be made payable to Montclair State	College.

# (11) Grades to be maintained

An average grade of "B" or better is required for the obtaining of the Master's degree. No graduate credit is given for work below "C."

All charges are payable during the registration period.

These charges are subject to revision.

# (12) Grading System

Marks indicating degrees of achievement in the various courses are given in letters A, B, C, D, and F.

A-Excellent

B-Good

C—Fair

D-Poor (No "D" credit may be counted toward the Master's degree)

F-Failure

In.—Incomplete Work\*

WP-Withdrawn, passing

WF—Withdrawn, failing

# (13) Graduate Level Courses

The majority of the courses taken or credits earned should be on the 500-600 level.

<sup>\*</sup>Where a student has had an unavoidable absence, or presents other good reasons in accord with approved policy, a course may be marked "Incomplete" at the end of a semester or summer session. This mark must be removed by a final grade, or the course cannot be credited and the mark becomes "F" automatically. Incomplete grades assigned during the spring semester or summer session must be cleared before November 15. Fall semester incomplete grades must be cleared before April 15.

# (14) Master's Degree Credit

The responsibility of taking the right courses for the program being pursued rests with each student. It is important that at each registration period the student bring his official work program, together with his transcripts of graduate work taken at this College, so as to avoid taking courses that cannot be counted toward the degree.

# (15) Number of Semester Hours: Minimum

A minimum of thirty-two semester hours of graduate credit is required in all departments. Additional hours may be added to compensate for any deficiencies found in the applicant's undergraduate record. A minimum of forty semester hours is required in the program with a major in teaching. A minimum of sixty semester hours is required for certification in the School Psychology Program.

# (16) Residence Requirements

- a. A minimum of thirty-two semester hours of graduate work in residence is required except as noted in item 22.
- b. The student must attend the College as a full-time graduate student for at least one summer session (six semester hours), or one regular semester (twelve semester hours) to meet the residence requirements.

Fully employed teachers are encouraged to restrict the graduate work carried during the year, and to take advantage of the course offerings in the summer session when their normal professional responsibilities will not interfere with the study expected of advanced students.

# (17) Restrictions for Graduate Program Credit

- a. No credit is granted toward the Master's degree for certain specifically designated basic courses on the 400 level which are required for initial certification.
- b. No credit is granted toward the Master's degree for courses taken more than ten years prior to the date on which the student expects to receive his degree.
- c. No more than eight semester-hours of graduate credit taken at Montclair prior to matriculation, or more than six semester hours of graduate credit offered by Montclair in extension (offcampus courses), may be credited toward the Master's degree.
- d. No graduate credit is granted retroactively for work taken in excess of undergraduate degree requirements.
- e. No graduate credit is allowed for concurrent registration (enrollment) in other colleges without the approval of the Associate Dean/Graduate.

- f. No graduate credit is granted for courses in which a student has been an auditor.
- g. Since some course numbers and/or titles have been changed, responsibility for avoiding duplication is placed upon the student. No course once taken for credit may receive credit a second time under another number and/or title.

# (18) Retention Standard

The Associate Dean/Graduate and the student's Program Advisor may, for good reason, recommend to the Dean of the College the revocation of matriculated status of any one who is found deficient in personality, integrity, temperament, emotional adjustment, or physical stamina, or after it has been established that there is evidence of serious unprofessional conduct.

A student who does not maintain an acceptable standard of scholarship (an average of "B" or better) will be placed on probation. If it then becomes apparent that he is unlikely to achieve an acceptable standard, he will lose his status as a matriculated student.

## (19) Student Load

Graduate work should involve careful and intensive study with ample time to explore areas which may warrant study. Twelve to sixteen hours of work per semester is considered a full-time program for the graduate student in residence.

For teachers, or others employed full time, six hours of work in any one semester shall be the maximum load, with four semester hours recommended. In the regular six-week summer session, the maximum load shall be eight semester hours. However, the Graduate Council strongly recommends that the student consider six semester hours of work a full program.

# (20) Thesis

Four of the total credits can be satisfied by a thesis which meets the approval of the Graduate Council. In some departments the thesis may be offered in place of the written comprehensive examination, and/or the oral examination.

# (21) Time Limit

Work for the Master's degree must be completed within six years after the date of matriculation. If an extension of time is required, a request for such extension must be filed with the Associate Dean/Graduate. The student's progress will then be reviewed and evaluated in accordance with the requirements for the degree as stated in the most recent Graduate Bulletin and with the established

policy for this type of continuance. The policy statement may be obtained from the Graduate Office.

# (22) Transfer Credit

With the approval of the student's program advisor and the Associate Dean/Graduate, a graduate of an accredited college or university who has matriculated on or after April 12, 1962, may transfer some graduate credits. The maximum amount of credit which may be accepted is eight semester hours. The procedure is to arrange in advance for this privilege, and to make application for transfer of credit on a form available in the Graduate Office. Credit for courses taken prior to 1956 may not be transferred.

# (23) Withdrawal from a Course

A written notice filed in the office of the Evening Division is required. (Refunds are computed from the date of receipt of such written notice.) Students who do not submit a written notice will receive the mark of "F" in those courses which they cease to attend. Non-attendance at classes or oral or written notification to the instructor does not constitute a formal withdrawal.

Students who withdraw after the mid-point in the semester will receive an automatic grade of "F", except with approval of the Dean of the College in certain very exceptional cases.

#### **SERVICES**

ACADEMIC ADVISORS: Appointments with the Graduate Advisors, the Associate Dean/Graduate, or the Director of the Evening Division may be made by mail or telephone. Appointments should be made as early as possible prior to the end of the current semester. Advisors are available during hours of registration.

AUDIO-VISUAL CENTER. The Center provides audio-visual materials, equipment, and services for use by faculty and students for class-room instruction and presentation. The staff of the Center is available for special consultation on audio-visual problems, for demonstrations of audio-visual materials and methods and for special teaching and training in the area of audio-visual education. The Center handles the scheduling of all films for the College, as well as their ordering, mailing, and rental. Student assistants are provided whenever the use of equipment is requested.

BOOKSTORE: The bookstore is located adjacent to the main lobby in the Student Life Building. This on-campus facility will be open during all hours of registration and evenings during the first two meetings of each class until 8:00 p.m. Thereafter, regular hours of 8:30 a.m. to 4:30 p.m. will be in effect.

Saturday hours during the Fall and Spring semesters are 8:00-11:00 a.m. when Evening Division classes are in session.

Books will be available for purchase one week before *in person* registration for the benefit of those graduates registering by mail.

HEALTH SERVICE: There is a registered nurse on duty in the College Health office. This office is located in the west wing of Russ Hall. Emergency medical care is available. Although regular office hours are from 8 a.m. until 4 p.m., evening services are available from 4 p.m. to 8 a.m. Between 10 p.m. and 7:45 a.m. the student must phone first to gain admittance. Phone 746-9500.

## LIBRARY

The main floor of the Harry A. Sprague Library includes the circulation desk, the technical processes area and the reference and bibliography collection. Here also are the periodical titles for the first part of the alphabet, A-G, and books classified from 000 to 399 (General Works, Philosophy, Religion, and Social Sciences, including Education). A Xerox machine makes possible copying (for 10¢ per exposure) any printed material.

The second floor includes periodical titles for the remainder of the alphabet, H-Z, and books classified from 400 to 999 (Philology, Pure and Applied Sciences, the Arts, Literature, and History).

A curriculum laboratory and special collections occupy separate rooms on the second floor. The special collections include the China Institute Library, a New Jersey collection, the Sullivan and the Webster Modern Poetry Collections, and the College Archives.

On the lower level of the library there are a reserve book room, a typing room with coin-operated typewriters, lounges and storage area.

SNACK BAR: Located in Student Life Building. Open Monday thru Thursday until 9:00 p.m. and Saturdays from 8:00 a.m. until 12 noon. The Snack Bar is a self-supporting operation. (Hours are subject to change depending upon income.)

Minimum: 32 s.h.

# DEPARTMENT OF BUSINESS EDUCATION

Graduate Advisor: DR. LOUIS C. NANASSY

The graduate work in the Department of Business Education is designed to prepare teachers of business education for administrative, supervisory, specialized work, or master teaching in the field of business education and distributive education. In order to attain these objectives the candidate has an opportunity to supplement his undergraduate program and to explore advanced areas of work in accordance with his individual background, experience, achievement, and professional needs.

Graduate work toward the Master of Arts degree in Business Education presupposes the completion of an undergraduate major in business or distributive education, or its equivalent. The undergraduate major is based on the requirements as established by the New Jersey State Board of Education. For further details see the Undergraduate Bulletin.

All candidates for the Master of Arts degree in Business Education must pass a comprehensive oral and written examination before they are granted the degree. This examination is given in the Spring Semester for those candidates anticipating graduation in June or September. It is general in nature and is intended to test the candidate's maturity of thought with respect to business and distributive education.

# REQUIREMENTS FOR THE M.A. DEGREE IN BUSINESS EDUCATION

- I. General Education (see Master's Degree Program Pattern) 6-12 s.h.
- II. Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h.

# III. Specialization 11-20 s.h.

- - B.E. 502. Evaluation of Current Literature in Business Education 2 s.h.
  - B.E. 603. Research Seminar in Business Education 2 s.h.

# Required, at least two of the following courses:

- B.E. 512. Improvement of Instruction in General Business Subjects 2 s.h.
- B.E. 514. Improvement of Instruction in Typewriting and
  Clerical Practice 2 s.h.
- D.E. 551. Improvement of Instruction in Distributive Education 2 s.h.
- B. Electives in Business Education and/or Distributive Education 10 s.h.

IV. Comprehensive Examination

# REQUIREMENTS FOR THE M.A. DEGREE IN DISTRIBUTIVE EDUCATION

- I. General Education (see Master's Degree Program Pattern) 6-12 s.h.
- II. Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h.
- III. Specialization 11-20 s.h.

## A. Required Courses

Holders of a New Jersey teacher's certificate in the field of business education who complete the following required specialization courses will be eligible for certification in Distributive Occupations. Courses (or their equivalents) will be waived that have been completed at either the graduate or undergraduate level, prior to admission to the program.

When courses are waived, students seeking a master's degree can fulfill the specialization requirement by substituting courses from list "B. Electives in Distributive Education."

D.E. 414.	Merchandising (Marketing & Distribution)	2	s.h.
D.E. 452.	Principles of Vocational Education	2	s.h.
D.E. 453.	Curriculum Development in Distributive Education	2	s.h.
D.E. 454.	Principles & Methods in Distributive Education	2	s.h.
D.E. 455.	Coordination of Distributive Education	2	s.h.
D.E. 456.	Organization and Administration of Distributive		
	Education	2	s.h.
D.E. 551.	Improvement of Instruction in Distributive Education	2	s.h.
D.E. 552.	Advanced Salesmanship	2	s.h.
D.E. 553.	Trends in Retail Distribution	2	s.h.
B.E. 603.	Research Seminar in Business Education	2	s.h.

Work Experience—Certification for Distributive Occupations requires two years of approved work experience in distributive occupations. This requirement may also be fulfilled by successful completion of the following:

Full-time coordinated and supervised work experience in an approved work station for the months of July and August (minimum of 8 weeks is required for D.E. 450 and also for D.E. 451). One evening class session a week is scheduled with the work program to discuss the progress and program.

## B. Electives in Distributive Education

D.E. 406.	Advertising
D.E. 417.	Marketing
D.E. 418.	Retail Store Management
D.E. 419.	Merchandise Information
D.E. 422.	Visual Merchandising
D.E. 423.	Buying for Distribution
D.E. 522.	Advertising Media
D.E. 554.	Workshop in Problems of Distributive Education 2 s.h.
D.E. 555.	Credits and Collections
D.E. 556.	Retail Personnel Administration
D.E. 557.	Sales Management
D.E. 558.	Executive Leadership in Retailing
D.E. 559.	Development of Retail Training Programs 2 s.h.
	Minimum: 32 s.h.

## GRADUATE COURSES IN BUSINESS EDUCATION

# B.E. 501. Principles and Problems of Business Education

2 s.h.

Survey of basic principles and practices of business education. Topics include history of business education, objectives, relationship of business education to general education, trends and problems in the field.

#### B.E. 502. Evaluation of Current Literature in Business Education

2 s.h.

Introduces the literature of business education to the graduate student from a research point of view. Current literature from all sources—articles, research papers, books—are evaluated, using selected criteria for such evaluation.

#### B.E. 503. The Business Education Curriculum

2 s.h.

Study of curricula in business education for various levels and types of schools. Evaluation of specific programs; development of improved curricula.

#### B.E. 504. Evaluation and Measurement in Business Education

2 s.h.

Constructing, administering, interpreting, and evaluating all types of testing and evaluation materials in business subjects.

#### B.E. 505. Administration and Supervision of Business Education

2 ch

Study of problems of organizing, directing, and supervising business education programs at the secondary school and collegiate levels.

# B.E. 511. Improvement of Instruction in Bookkeeping, Accounting, and Business Arithmetic

2 s.h.

Study of objectives, content, methods, teaching aids, and evaluation procedures. Prerequisites: Undergraduate methods course in bookkeeping and teaching experience.

## B.E. 512. Improvement of Instruction in General Business Subjects 2 s.h.

Study of objectives, content, methods, teaching aids, and evaluation procedures for courses such as general business, economic geography, business law, and consumer education. Prerequisites: Undergraduate methods course in general business and teaching experience.

# B.E. 513. Improvement of Instruction in Stenography and Secretarial Practice

2 s.h.

Refinement of teaching and personal skills, introduction to the latest instructional equipment and method are emphasized through demonstration, participation, and reading. Prerequisites: Undergraduate methods in stenography and teaching experience.

# B.E. 514. Improvement of Instruction in Typewriting and Clerical Practice

2 s.h.

Emphasis is placed on refinement of teaching and personal skills in typewriting and business machine operation. Latest recommended teaching techniques are examined, demonstrated, and evaluated. Prerequisites: Undergraduate methods in typewriting and teaching experience.

#### B.E. 521. Business Management Problems

2 s.h.

The problems approach is used in this advanced course in considering such topics as business ownership, finances, location and layouts, purchasing, personnel, and managerial controls.

# B.E. 523. Auditing

2 s.n.

This course develops the meaning and techniques of auditing procedure. It includes practice in the fundamental mechanics of auditing as well as in the making of the formal report on an audit. Prerequisite: 8 semester hours of accounting.

## B.E. 524. Advanced Tax Problems

2 s.h.

Preparation of tax returns for partnerships, trusts, corporations, and complicated individual tax returns. Also inheritance taxes, gift taxes, social security taxes, and tax benefits and returns required under social security tax law.

#### B.E. 525. Accounting Systems and Data Processing

2 s.h.

Deals with analysis of accounting systems and the organization of accounting information for use with manual and automated methods.

#### B.E. 526. Advanced Business Law Cases

2 s.h.

Designed to furnish a broad understanding and background in areas requiring considerable training to be effective in the classroom. Cases are concerned with the topics of contracts, negotiable instruments, insurance, bailments, carriers, sales, property, landlord and tenant, torts, and business crimes. Prerequisite: 6 semester hours of business law.

# B.E. 527A, B, C, D. Workshop in Clerical and Secretarial Practice, Advanced Stenography, Advanced Typewriting, Office Machines 2 s.h. each

These workshops, which may run simultaneously, provide opportunity for the study, planning, and development of teaching materials and projects fitted to the particular situation in which the person is teaching. Instruction is on an individual and small-group basis with occasional seminar meetings of the entire group. Prerequisite: Teaching experience in the field.

#### B.E. 528. Field Studies in Business Education

2 s.h.

Provides opportunity for the classroom teacher to visit and evaluate some of the practices of business offices, industries, and retailing organizations located in the metropolitan area. Experience is gained in planning, conducting, and follow-up of field trips.

#### B.E. 529. Audio-Visual Aids in Business Education

2 s.h.

This course develops knowledge and skill in using the many audio and visual aids available in teaching business subjects. Opportunity is provided for developing and constructing teacher-made audio-visual aids.

#### B.E. 530. Business Education in Post-High School Institutions

2 s.h.

This course is designed to acquaint the student with the purposes, curricula, methods, and problems of teaching business education subjects in post-high school institutions, including technical institutes, two-year, and four-year colleges.

#### B.E. 603. Research Seminar in Business Education

s.h.

Includes study and analysis of significant research studies in business education, investigation of procedures in educational research, and techniques of thesis writing. Outline of research project approved in B.E. 502 is developed and completed as partial requirement of this seminar. Prerequisite: Education 503.

#### SENIOR-GRADUATE COURSES IN BUSINESS EDUCATION

#### **B.E.** 404. Business Economics

3 s.h.

Although the nature and scope of economics is presented, this course deals primarily with the business aspects of economics as related to the free enterprise system, money credit and banking, Gross National Product, and devices measuring economic progress. The Federal Reserve System, business fluctuations and business cycles, taxation and government finance are also included as specific areas of course coverage.

#### B.E. 405. Office Practice—Clerical

3 s.h.

Much of the work in this course involves the use of machines—calculating, duplicating, bookkeeping, special typewriters, and transcribing machines. Filing is also part of the course.

#### B.E. 407. Office Practice—Secretarial

3 s.h.

This course familiarizes the prospective teacher of secretaries with the operation of voice-writing and duplicating equipment. The duties of the secretarial worker are studied. Understanding of office procedures and stenographic skills are strengthened through supervised office assignments and class work projects.

#### **B.E.** 408. Business Finance

3 s.h.

This course deals with the processes involved in the financing of business organizations from the time of their inception and promotion, during operation and expansion, and during the period of reorganization. Problems involving financing by means of stocks, borrowing capital, mortgages, bonds, and notes are solved.

#### B.E. 409. Consumer Education

3 s.h.

Consideration is given to the role of the consumer in the economy, some of the forces affecting consumer demand, governmental and private agencies aiding the consumer, and development of intelligent techniques for buying and using consumer goods and services.

## B.E. 410. Advanced Accounting

3 s.h.

This advanced course for students who have had two years of accounting emphasizes problems related to basic accounting principles, cost accounting, and intermediate accounting. Topics considered include determination of net income, valuation, consignments, preparation and analysis of financial statements, partnerships, and bankruptcy. Prerequisite: B.E. 402 or college equivalent.

#### B.E. 411. Tax Accounting

2 s.h.

The purpose of this course is to give a comprehensive picture of the Federal tax structure. Extensive training is provided in the application of basic principles to the specific problems of the individual. All forms involved in individual tax returns are studied. Prerequisite: 12 semester hours of accounting.

#### B.E. 412. Project Development in Consumer Education

2 s.h.

This course permits the students to explore in a specialized fashion two major areas of consumer education. Projects are developed on housing and furnishing of a home, which illustrate the handling of material and the procedures that might be used in developing other consumer education units. Prerequisite: A course in consumer education or economics.

## B.E. 421. Finance and Investments for Families

2 s.h.

This is a general course in investments, trusts, and estates. It concerns itself with types of securities, diversification, sources of information, operation of the stock market, and analysis of financial statements. Also covered are trusts, wills, and estate planning.

# B.E. 433. Seminar: Study of use of Multiple-Channel Equipment in the Business Education Classroom 3 s.h.

This seminar concentrates on the use of multiple-channel equipment in the teaching and development of skills; explores the learning materials presently available; experiments with the development of original learning materials; studies problems arising for the teacher and the student in the use of such equipment; and explores the possibility of independent study in the skills areas. The writings and experiences of others using similar installations are evaluated. Various makes of equipment are studied. Some familiarity with the use of such equipment is achieved.

#### B.E. 434. Data Processing-Introduction

3 s.h.

The primary purpose of this course is to familiarize the classroom teacher with literature and vocabulary of data processing; to study input and output media; types of equipment; to examine actual installations and to consider data processing in terms of the high school program and high school placement. The significance of job analysis and systems development is stressed.

#### B.E. 449. Supervised Business Work Experience and Seminar

2 s.h.

Students will gain supervised paid-for work experience in a cooperating office. As part of the supervised work program they attend a weekly evening seminar in which discussions will center on their activities in the offices, and on their development of executive abilities during the training. Trainees are required to submit regular progress reports. Work program is in operation full time during July and August (minimum six weeks) of the summer session following their junior year, and is offered every summer for graduate and special students.

#### B.E. 480. Touch Shorthand in Recording Communication

2 s.h.

This course concentrates on introducing keyboard reaction patterns and theory concepts of the touch shorthand machine and in developing basic skills and a knowledge of operation of the machine. Time will also be devoted to discussing methods of presentation, and there will be discussions on how the teacher would organize and evaluate a course in touch shorthand.

## GRADUATE COURSES IN DISTRIBUTIVE EDUCATION

#### D.E. 522. Advertising Media

2 s.h.

This course in advertising offers an opportunity to study in some detail the uses of various advertising media such as newspapers, magazines, radio, television, and direct mail, and to evaluate their effectiveness in terms of campaigns.

## D.E. 551. Improvement of Instruction in Distributive Education 2 s.h.

This course gives the experienced distributive education teacher an opportunity to study the content, method, teaching aids, and evaluate procedures in instruction in the distributive education program.

## D.E. 552. Advanced Salesmanship

2 s.h.

The behavioral science of selling is covered including the strategy of selling, importance of timing, tailoring selling to the individual prospect, sales psychology behind the demonstration, creative selling, and the nature of prospects' motivation. Sales executives are invited to the classroom to answer questions and relate personal experiences of the professional salesman.

#### D.E. 553. Trends in Retail Distribution

2 s.h.

A comprehensive introduction to and evaluation of the field of retailing. The trends that indicate the future structure and functioning of the retail field, including consumer and marketing developments, are considered. Current periodic literature is examined and outside speakers are used to supplement classroom lectures.

#### D.E. 554. Workshop in Problems of Distributive Education

2 s.h.

Intensive analysis of problem-solving in distributive education programs. Discussion on individual problems and experiences in teaching and administering distributive education programs. Committee work-seminar method is used.

#### D.E. 555. Credits and Collections

2 s.h.

Study is made of the nature, basis and meaning of credit and credit control. Topics include functions of credit, credit instruments, types of credit, elements of determining credit risk, sources of credit information, and collection procedures.

#### D.E. 556. Retail Personnel Administration

2 s.h.

The objective of this course is to develop a comprehensive understanding of the personnel responsibilities of all retailing executives. A critical evaluation of current personnel policies and practices of successful retail stores is made. Visiting store executives are invited to discuss personnel administration in the classroom.

# D.E. 557. Sales Management

2 s.h.

The place of the sales manager in modern retail marketing is covered as well as sales organization, sales operations, sales planning, and sales analysis. Also considered are the selection and training of salesmen, ethical problems in sales management, and social responsibilities of a sales manager in today's marketing operations.

#### D.E. 558. Executive Leadership in Retailing

2 s.h.

The objectives of this course are to acquaint the student with and to make him aware of the kinds of interrelationships among people in the retail organization, as well as to give the student insight into the techniques and problems of the modern executive. Awareness of the leadership required and the need for decision making are covered.

#### D.E. 559. Development of Retail Training Programs

2 s.h.

Analysis of training problems confronting managers in both line and staff positions are covered. The course includes both selling and non-selling programs, the training of new and present employees, general training of personnel in the store as it relates to store policies, store organization, and morale. Job analysis and evaluation as well as training of executives and supervisors for transfer, promotion, and versatility are considered.

#### SENIOR-GRADUATE COURSES IN DISTRIBUTIVE EDUCATION

#### D.E. 406. Advertising

2 s.h.

A comprehensive view is given of the policies and procedures involved in the planning, preparation, and application of advertising in a retail store. A critical approach is taken to the problems confronting the field of advertising and sales promotion. Consideration is given to the definition of sales promotion, objectives, establishment of policies, analysis of sales potentials, evaluation of media and agents, coordination and follow-up of sales promotion and advertising.

## D.E. 414. Merchandising

2 s.h.

This course analyzes the problems of how, what, where, and when to buy; terms of purchasing, tested receiving and marketing procedures; mathematics of merchandising—setting retail price, planning mark-up and mark-down; and inventory controls.

## D.E. 417. Marketing

2 s.h.

A study of the principles underlying the distribution and services from the manufacturer to the consumer. Marketing policies and practices are covered as well as the evolution and change of marketing procedures and recent governmental activities affecting marketing. A managerial approach to the subject is given.

#### D.E. 418. Retail Store Management

2 s.h.

The main objective of this course is to acquaint students with the problems involved in the successful operation of a retail organization. Attention is given to the preparation of the store for business, the movement of merchandise from the source to the store, the preparation of the goods for sale, the movement of the goods to the selling floor and then to the customer. Customer adjustment policies, store protection, and the latest kinds of equipment used by retail stores are also discussed and evaluated.

#### D.E. 419. Merchandise Information

2 s.h.

Merchandise information, both textiles and non-textiles, are covered to give the student the background and selling information needed in the field of retailing. Students will be given standards for determining quality of products and a knowledge of how to care for them. Manufacturing processes of various products will be considered.

#### D.E. 422. Visual Merchandising

3 s.h.

A study is made of the basic principles and elements of color, line, form, texture, and space as they relate to displays, merchandising, and advertising. Topics include appropriate display space, lighting arrangements, improvisation of display equipment, the use of papier mache forms, seasonal displays, equipment, and care of display fixtures.

#### D.E. 423. Buying for Distribution

2 s.h.

A study of the techniques employed in performing the functions of the merchandise division of a store. The functions of the buyer and the many facets of the buyer, and problems in the store are discussed. Other topics included are customer demand analysis, comparision shopping, bargain hunting, and planning the buyer's budget. Buying fashions, staples for independent stores, chain stores, and resident buying offices, as well as foreign buying are covered.

#### D.E. 450. Supervised Work Experience and Seminar I

2 s.h.

Students will gain supervised paid-for work experience in a cooperating department or mass merchandise (discount) store. As part of the supervised work program they attend a weekly evening seminar in which discussions will center on their activities in the stores and on their development of executive abilities during the training. Trainees are required to submit regular progress reports. Work program is in operation full-time during July and August (minimum of 8 weeks) of the summer session following completion of the sophomore year for undergraduates, and offered every summer for graduate and special students.

#### D.E. 451. Supervised Work Experience and Seminar II

2 s.h.

Supervised paid-for store experience is gained in a specialty or limited-price variety store. Students attend a weekly evening seminar in which discussons will center on their activities in the stores and on their development of executive abilities during the training. Trainees are required to submit regular progress reports. Work program is in operation full-time during July and August (minimum of 8 weeks) of the summer session following completion of the junior year for undergraduates, and offered every summer for graduate and special students.

## D.E. 452. Principles of Vocational Education

s.h.

The purpose of this course is to acquaint educators and prospective educators with the basic principles and practices of vocational education. The course covers the cooperative Federal-State programs of vocational education developed under the Smith-Hughes Act, George-Barden Act, George-Deen Act, and the 1963 Vocational Education Act.

#### D.E. 453. Curriculum Development in Distributive Education

2 s.h.

The purpose of this course is to acquaint educators and prospective educators with the construction of the distributive education curriculum. Included are an understanding of the

needs and interests of the community in curriculum planning, careful planning and group cooperation in curriculum, the over-all development of the pupil, developing vocational competencies in curriculum, adult education curriculum planning, keeping records and results through follow-up procedures, and the evaluation of curriculum.

#### D.E. 454. Principles and Methods of Distributive Education

The purpose of this course is to acquaint educators and prospective educators with the basic principles of teaching distributive education as well as specific methods of teaching the program. Coverage includes the federal legislation as it relates to the program, coordinator's duties, methods in teaching store subjects, use of lecture and demonstration in teaching, forms, reports and manuals, planning the lesson, human relations for store personnel, visual aids, free sources of materials, textbook evaluation, trade journal use, and the DE Club as a teaching device. Teaching demonstrations are also a part of the program.

#### D.E. 455. Coordination of Distributive Education

2 s.h.

The purpose of this course is to acquaint educators and prospective educators with the objectives of distributive education as they relate to the coordinated distributive education program. Included are the coordinator's job, basic factors of cooperative programs, the use of advisory committees, policies of local school systems, making preliminary surveys of the community, evaluating training possibilities, selecting training agencies, pupil selection, supervision and directed study methods.

## D.E. 456. Organization and Administration of Distributive Education 2 s.h.

The purpose of this course is to acquaint educators and prospective educators with the objectives of distributive education and with the details and problems of organizing and administering as well as supervising a complete cooperative program in distributive education. Areas covered are: organization of vocational education on the federal, state and local levels, understanding the use of a state syllabus, setting up, supervising and operating a cooperative program, surveys of community needs and student needs, physical equipment requirements, advisory committees, and the use of public relations and extension programs.

# DEPARTMENT OF EDUCATION

Graduate Advisors: Dr. Earl Peckham, Administration and Supervision

Dr. Earl C. Davis, Student Personnel Services, including School Social Work

(Visiting Teacher)

MISS SIMONE PICARD, Major in Teaching

MISS MARIA SCHANTZ, Reading

Mr. HARRY HOITSMA, Outdoor Education and Conservation

Graduate courses in this department are designed to meet one or more of six needs: (1) instruction in the Administration and Supervision major leading to the M.A. degree and New Jersey certification for one or more of the positions of General Secondary Supervisor, Secondary School Principal, and Assistant Principal or Vice Principal; (2) instruction in the Student Personnel Services, including School Social Work (Visiting Teacher) leading to the M.A. degree and New Jersey certification in guidance and school social work; (3) advanced professional instruction for administrators, supervisors, counselors, and classroom teachers; and (4) Master of Arts with a major in Teaching, designed to prepare liberal arts college graduates for teacher certification by combining certification requirements with additional work at the graduate level; (5) M.A. in Reading; and (6) M.A. in Outdoor Education and Conservation.

The admission requirements and the requirements for the M.A. degree in each of the separate areas within the field of Education are given separately. Students who are not candidates for a degree may elect any courses except those for which they may not have the necessary prerequisites or which are restricted to candidates in the field of specialization.

# ADMISSION TO AND REQUIREMENTS FOR THE M.A. DEGREE IN ADMINISTRATION AND SUPERVISION

# **Admission Requirements**

In addition to the general College admission requirements, a student must hold a New Jersey teacher's certificate and have at least two years teaching experience in grades 7-12 completed prior to matriculation. Those whose undergraduate work and experience were obtained outside of New Jersey must meet New Jersey certification and experience standards. The degree will not be conferred until the candidate has had three successful years of teaching experience at the secondary level.

# **Degree Requirements:**

Satisfactory completion of not fewer than thirty-two semester hours of work as follows: (In exceptional cases appropriate substitutions or changes may be made in these requirements upon approval of the Program Advisor.)

I.	Foundations	for I	Educational Leadership
	(6 to 8 s.h.	subjec	et to approval by Graduate Advisor)
	*Ed.	503	Methods and Instruments of Research 2 s.h.
	Ed.	406	Educational Sociology 3 s.h.
	Ed.	431	Individual and Group Dynamics
	Ed.	492	Comparative Education 3 s.h.
			Social Psychology
	*Psych.		Tests and Measurements 3 s.h.
	Soc.	565	Community Resources and Youth
	Ed.	533	Philosophy of Education 3 s.h.
	Ed.	534	Economic and Political Determinants in
			New Jersey 2 s.h.
II.	Specializatio	n	
	-		ializing in Administration of Secondary Schools
	11. 10/ 1/1050	с врес	14 s.h. required
	Ed. 510	Intr	oduction to Educational Administration 2 s.h.
	Ed. 511		ool Business Administration 2 s.h.
	Ed. 514		ool Law 2 s.h.
	Ed. 520		ministration of Modern Secondary Schools 2 s.h.
	Ed. 530		riculum Construction in the Secondary Schools 2 s.h.
	Ed. 629		earch Seminar in Secondary School Administration 2 s.h.
	Ed. 540		ervision of Instruction 2 s.h.
	P For those	a cnac	ializing in Supervision and Curriculum Development
	D. Por mose	e spec	12 s.h. required
	Ed. 510	Intr	oduction to Educational Administration 2 s.h.
	Ed. 408		ection and Utilization of Audio-Visual Materials 2 s.h.
	Ed. 530		riculum Construction in the Secondary Schools 2 s.h.
	Ed. 639		earch Seminar in Curriculum Construction 2 s.h.
	Ed. 540		ervision of Instruction 2 s.h.
	Ed. 541		pervision of Special Fields
TIT	General Edi	ucatio	n (See Master's Degree Program Pattern) 6 s.h. required
111.	Concrat Eut		(See Master 5 Degree Program Pattern) 6 S.H. Tequitot
IV.	Educational	Elec	tives 2-4 s.h.
	One or two	2 s.h	graduate courses elected from the Education Department

2 s.h.

One or two 2 s.h. graduate courses elected from the Education Department graduate offerings with the approval of the Graduate Advisor.

# V. Field Experience in Administration and Supervision (Education 623)

These credits are to be earned through an administrative or supervision assignment in a public junior or senior high school in cooperation with the principal of the school, and supervised by a college staff member. Where such assignments are not possible an appropriate substitute experience will be planned with the student's advisor. Those specializing in supervision and curriculum development will be assigned to their chosen area or level of education.

# VI. Comprehensive Examination

In addition to successful completion of the thirty-two semester hours of graduate work study, each candidate must pass a written comprehensive examination testing the professional insight, judgment, and broad acquaintance needed for the leadership role in education.

<sup>\*</sup> Required courses

# IN STUDENT PERSONNEL SERVICES, INCLUDING SCHOOL SOCIAL WORK (Visiting Teacher)

In addition to general College Admissions Requirements, a student must hold a New Jersey teacher's certificate and have completed at least one year of teaching prior to matriculation. (Not more than eight semester hours of credit will be counted toward this degree prior to the obtaining of the certificate and the beginning experience.)

For candidates for the school social work certificate and/or degree no teacher's certificate is required and one year of school social work experience may be substituted for the teaching experience.

I.	Guidance and Counseling		
	Ed. 580 Principles of Guidance	2	s.h.
	Ed. 588 Techniques of Interviewing and Counseling Ed. 582 Vocational Guidance	2	s.h.
	Ed. 582 Vocational Guidance	Z	s.n.
II.	Testing and Evaluation	3	s.h.
	Psych. 578 Tests and Measurements	3	s.h.
TTT	Psychology Select	6	e h
111.	Psych. 560 Advanced Educational Psychology		
	Psych, 561 Child and Adolescent Development	3	s.h.
	Psych. 562 Dynamics of Human Behavior	2	s.h.
	Psych, 563 Theories of Learning	3	s.h.
	Psych, 564 Psychology and Education of the Physically and Mentally Handicapped	2	s h
	Psych. 565 Psychology and Education of the Socially		
	and Emotionally Handicapped		
	Psych. 573 Physiological Psychology	3	s.h.
IV.	Sociological Foundations	6	s.h.
	Soc. 565 Community Resources and Youth		
	Select 3 s.h. from the following:		
	Soc. 401 Modern Sociology Soc. 402 Social Pathologies		
	Soc. 402 Social Pathologies	3	S.n.
	Home Ec. 429 Family Sociology	1. 6	each
	Soc. 406 Rural Sociology		
	Ed. 406 Educational Sociology	3	s.h.
V.	Research	6	s.h.
	Ed. 503 Methods and Instruments of Research (required)	2	s.h.
	A. For emphasis in Guidance;		
	Ed. 602 Research Seminar in Guidance	2	s.h.
	Ed. 604 Field Work in Guidance		
	B. For emphasis in School Social Work (Visiting Teacher)		
	Ed. 605 Research Seminar in School Social Work	2	s.h.
	Ed. 607 Field Work in School Social Work (Visiting Teacher)	2	s.h.
VI.	Electives 6 s.h. mi	nin	num
	Ed. 509 Medical Problems in Education		
	Home Ec. 427 The Disadvantaged Family	2	s.h.
	Ed. 577 Social Case Work	2	s.h.

Ed.		or 595B Foundations of Education I or II
	(For	students who do not hold teaching certificates) 3 s.h. each
Ed.	583	Educational Guidance 3 s.h.
Ed.	585	Group Guidance and Counseling 3 s.h.
Ed.	586	Elementary School Guidance and Counseling 3 s.h.
		Administration and Supervision of Guidance Programs 3 s.h.
Ed.	589	Student Personnel Services in Higher Education 3 s.h.
		Group Tests and Statistical Analysis

## Certification Requirements for School Social Worker (Visiting Teacher)

Students who desire to earn the School Social Worker (Visiting Teacher) certificate and who do not plan to matriculate for the Master of Arts degree mu

		lowing courses or their equivalents:
Psych.	561	Child and Adolescent Development
Ed.	595A	or 595B Foundations of Education I or II 3 s.h. each
Soc.	401	The Family as an Institution or
Home Ec.	429	Family Sociology or
Soc.	405	Urban Sociology
Ed.	577	Social Case Work 2 s.h.
Psych.	562	Dynamics of Human Behavior
Soc. Ed	509	Medical Problems of Education
Soc. St.	565	Community Resources and Youth 3 s.h.
Home Ec.	427	The Disadvantaged Family 2 s.h.
Ed.	605	Research Seminar in School Social Work
	(Visi	ting Teacher) or
Ed.	607	Field Work in Social Work (Visiting Teacher) 2 s.h. each
		Total 25 s.h.

An evaluation of a student's previous work will be made. If the student has completed equivalent courses at the undergraduate level or in post-graduate work, these will be accepted for certification and the balance of graduate work will be outlined on a work program (program of studies) which will be issued to the student.

# ADMISSION TO AND REQUIREMENTS FOR THE M.A. DEGREE IN READING SPECIALIZATION (7-12)

# **Admission Requirements**

Requirements are those for all graduate students applying for matriculation into a Master's Program at Montclair State College.

Matriculation normally requires prior completion of the basic courses in reading education needed for New Jersey certification to teach reading.

Provision is made in this program to matriculate certified secondary school teachers who have demonstrated interest and ability suitable to reading education. These applicants shall furnish acceptable evidence of talent appropriate for competence in reading instruction. Evidence, for example, may be in the form of letters of recommendation from the school system superintendent or the school building principal.

# **Degree Requirements**

Satisfactory completion of not fewer than thirty-two semester-hours of work as follows: (In exceptional cases appropriate substitutions or changes may be made in these requirements upon approval by the Program Advisor).

I. General Education (see Master's Degree Program Pattern) ........... 6-12 s.h.

II. Basic Professi	onal Education (see Master's Degree Program Pattern) 6-9 s.h.
Elect courses i	rom the following:
Graduate Cou	rses:
	00 Recent Trends in Secondary School Methods 2 s.h.
	14 School Law
Ed. 3	School Students
Psych. 5	60 Advanced Educational Psychology 3 s.h.
Psych. 5	
Psych. 5 Psych. 5	
Senior-Gradua	
Ed. 4	06 Educational Sociology
	Selection and Utilization of Audio-Visual Materials 2 s.h.
Psych. 4	
	92 Comparative Education
	Senior-Graduate Related Courses:
A student me	by receive credit for one or the other courses selected from
*	O1 Tests and Measurements in Secondary Education or 2 s.h.
Psych. 4	
	and Learning
Psych. 5	64 Psychology and Education of the Physically and Mentally Handicapped or
Psych. 4	
Psych. 5	65 Psychology and Education of the Socially and
	Emotionally Handicapped
	Principles and Techniques of Guidance or 2 s.h. Guidance for the Classroom Teacher 3 s.h.
	in Reading
•	ourses for all candidates:
Ed. 552 Ed. 554	The state of the s
Ed. 556	
Ed. 659	Research Seminar in Reading 2 s.h.
B. Elective Co	urses:
Selections am	ong the following courses will be determined through advise-
	pased on needs and interests of each student. Reading Electives
	e at least one of these courses.)
Ed. 55	N Organization and Administration of Secondary School Reading Programs
Ed. 5	53 Techniques of Reading Improvement in
	Secondary Schools 2 s.h.
	55 Case Studies of Reading Difficulties II 2 s.h.
	57 Corrective and Remedial Reading II 2 s.h. 58 Field Experiences in Reading 2 s.h.
	ically Related to Reading:
	12 Growth and Structure of the English Language 2 s.h.
-	16 Language Problems in the English Cuririculum 2 s.h.
0.	41 The New Grammar 2 s.h.
Speech 439	

Speech	439G	Speech Correction	2	s.h.
Speech	464	Psychology of Oral Communication	2	s.h.
Speech	466	Speech Development: Improvement and Re-Education	2	s.h.
Speech	468	Measurement of Hearing	2	s.h.
Ed.	408	Selection and Utilization of Audio-Visual Materials	2	s.h.
Psych.	564	Psychology and Education of the Physically and		
		Mentally Handicapped	2	s.h.
Psych.	565	Psychology and Education of the Socially and		
		Emotionally Handicapped	2	s.h.

## IV. Additional Departmental Requirements:

- A. Supervised clinical experience within the framework of a required course and/or in addition to course work. Arrangements will be made to provide this experience in the Montclair State College Campus Reading Center.
- B. A written comprehensive examination, supplemented, if necessary, by an oral examination.

## COURSES

Education, English, and Speech courses are listed in their respective departments in this catalog.

Additional courses in Reading Specialization are listed in Education offerings.

# ADMISSION TO AND REQUIREMENTS FOR THE M.A. DEGREE (Major in Teaching)

# SECONDARY (7-12) AND SPECIAL FIELDS (K-12)

These Certificate and Master's Degree programs are designed especially for college graduates who wish to prepare to become secondary school teachers or teachers of special subjects such as art and music in the elementary and secondary grades. The content, organization, materials, and methods of these courses are designed with this consideration of the student's maturity, academic background, and experience. This M.A. program is open to students with undergraduate background equivalent to a teaching field in one of the following areas: Art, Business Education (e.g. Bookkeeping and Accounting, General Business Education, Secretarial Studies), English, Foreign Languages (e.g. French, Spanish, Latin), Home Economics, Industrial Arts, Mathematics, Music, Physical Education, Science, Social Studies, Speech and Dramatic Arts.

# Admission Requirements: (Certificate\* or Degree Programs)

Admission is restricted to those selected graduates of accredited colleges who indicate high potential for teaching, and to in-service teachers with emergency or provisional certificates.

College graduates not employed as teachers will be screened for admission with due consideration to:

- a. Suitability or character and personality for teaching
- b. Health examination
- c. Speech and writing competence
- d. Competence in teaching field, based upon undergraduate grades of B— or better (2.67 on a 4 pt. scale). Students who present lower grade point averages must also present scores earned on the Graduate Record Examination Aptitude Test. . . .

In-Service teachers holding emergency or provisional certificates, employed by local school districts, will be admitted to the program to the extent to which the College staff can provide adequate supervisory services upon application, and agreement of the employing superintendent of schools to enter into a cooperative program of supervision of the student in connection with course Education 595E, 595F Supervised Teaching Seminar. During the first semester these students will complete the application procedure regarding character, health, speech, and writing, and preparation in subject-matter field. When the student completes six to ten semester hours at Montclair, a decision will be made regarding matriculation for the M.A. degree. If, as a result of failure to satisfy the screening criteria or unsatisfactory performances in the program, it is considered necessary to withdraw a student, conferences will be arranged with the student and the employing superintendent as early as possible.

# Certification and Degree Requirements

## I. Basic Background Requirements

A student must have a minimum of thirty graduate or undergraduate semesterhour credits in general background courses distributed in at least three of the following fields: English, social studies, science, fine arts, mathematics, and foreign languages. Six semester-hour credits in English and six semester-hour credits in social studies will be required.

## II. Subject-Matter Specialization

A student must have a subject-matter background suitable in extent and coverage to constitute a teaching major in at least one field. Evaluation should be done through the certification advisor and departmental advisor.

## III. Professional Requirements

Prior to completion of the Certificate and/or Master's Degree programs, the student must have completed the following professional curriculum. Courses may be waived that have been completed at either the graduate or undergraduate level, prior to enrollment in the program. However, no student will be recommended for a certificate or a Master's Degree who has not completed Student Teaching\* or the Supervised Teaching Seminars at the College.

Ed. 595A	Foundations of Education, Part I
	Foundations of Education, Part II
Ed. 595C	Structure and Organization of American Schools 3 s.h.
Ed. 595D	Curriculum and Methods of Instruction 3 s.h.
Psych. 560	Advanced Educational Psychology
Psych. 561	Child and Adolescent Development
	Teaching 8 s.h. Supervised Teaching Seminar 4 s.h. each

<sup>(1)</sup> Although part of the professional program may be waived on the basis of previous college work, students are admitted to Education 403, Student Teaching, only after completing sufficient preparation at the college to enable the college to assess their potential as teachers and to recommend them to a school district as student teachers. <sup>(2)</sup>Teachers in service on substandard certificates will substitute Education 595E, 595F, Seminar and Supervised Teaching. These students will be admitted to the program only with the prior permission of the local superintendent of schools, and agreement with the local school system regarding a program of joint supervision with the college. Unlike Student Teaching, the Seminar and Supervised Teaching may be the initial course in the student's program.

Students who successfully complete the Certificate Program will be recommended for appropriate New Jersey teacher certificates.

Total Professional Program for Certification	26	s.h.
D. Additional Requirements for the M.A. degree	14	s.h.
Ed. 595G. "Action" Research for Teachers	3	s.h.
Ed. 595H. The Teaching of Communication Skills	3	s.h.
Electives	8	s.h.

Students may choose, with advisement, electives in general education or subject matter specialization.

Selected matriculated students may be invited to develop a Master's thesis of quality under the guidance of a thesis advisor for which four semester hours of elective credit will be allowed.

# Total Master of Arts (Major in Teaching) Minimum 40 s.h.

If part of the professional requirements are waived on the basis of previous college work, students may take less than 40 s.h. of work at the College; however, to qualify for the Master of Arts degree, at least 32 semester hours of graduate work must be completed, under advisement, in the Montclair State College Program.

# ADMISSION TO AND REQUIREMENTS FOR THE M.A. DEGREE IN OUTDOOR EDUCATION AND CONSERVATION

Admissions Requirements:

Student must hold a Bachelor's degree from an accredited institution; have a high scholastic average (at least a 2.67 based on a four point scale); hold a N.J. teaching certificate; have an interest in curriculum development; and have a background in elementary education or science, geology, camping, conservation, outdoor education, or related fields.

Most of the courses will be offered on campus at Montclair State College and will be supplemented by offerings at the New Jersey State School of Conservation, Glassboro State College, Trenton State College, and Rutger's College of Environmental Sciences.

A required practicum (Ed. 443 or 444) will be taken at the School of Conservation in Stokes State Forest.

# **Program Outline**

T.

Outdoor Education and Conservation 12-18 s.h.		
A. Purpose and Philosophy of Outdoor Education (one course required)		
Ed. 440 Outdoor Education		
B. Conservation Workshop (one course required)		
Ed. 411 Conservation Education		
Sci. 414 Conservation in Plants and Animals		
Sci. 415 Conservation of Soil and Water		
C. Outdoor Resources and Recreation (one course required)		
Ed. 442 Practicum in Camp Leadership		
F.A. 415 Designing in Native Materials		
P.E. 551 Philosophy of Recreation in School and Community 2 s.h		
D. Developing Curriculum Guides, Tools, and Materials for Outdoor		
Education (electives)		
Sci. 420 Water Supply and Conservation Problems		
Ed. 480 Field Science for Elementary Teachers 2 s.h		
Sci. 405 Field and Laboratory Studies in Science		

	E.	Administration and Development of Outdoor Education Programs (one course required)				
		Ed. 443 Practicum in Camping Education and Administration .	3	s.h.		
П.	En	vironmental Science 12	-18	s.h.		
	A.	Plants (one course required)				
		Bio. 422 Fields Studies of Flowering Plants	. 4	s.h.		
		Bio, 424 Morphology of Flowering Plants	. 4	s.h.		
		Bio. 425 Elementary Plant Physiology	. 4	s.h.		
		Bio. 520 Plant Physiology	. 4	s.h.		
		Sci. 414 Conservation of Plants and Animals	. 2	s.h.		
	B.	Animals (one course required)				
		Sci. 412 Field Studies in Science: Biological	. 2	s.h.		
		Bio. 412 Genetics				
		Bio. 414 Field Ornithology				
		Bio. 530 Animal Behavior				
		Bio. 540 Parasitology	. 4	s.n.		
	C. Soil, Minerals, Natural Resources (one course required)					
		Earth Sci. 406 Paleontology	. 4	s.h.		
		Earth Sci. 408 Mineralogy	. 4	s.h.		
		Sci. 415 Conservation of Soil and Water	. 2	s.h.		
	D.	Air and Water (electives)				
		Sci. 420 Water Supply and Conservation Problems	. 2	s.h.		
		Physics 410 Meteorolgy				
		Earth Sci. 430,				
		431 Oceanology and Limnology I and II	h. e	each		
	E.	General (electives)				
		Bio. 512 General Ecology	. 4	s.h.		
		Bio. 516 Evolution	. 2	s.h.		
		Sci. 405 Field and Laboratory Studies in Science	. 4	s.h.		
		Sci. 411 Problems in Field Studies in Science, Physical	. 2	s.h.		
		Sci. 412 Field Studies in Science: Biological	. 2	s.h.		
		Sci. 413 Field Studies in Science: Physical				
		Physics 406 Astronomy	. 4	s.h.		
П.	Soc	cial Sciences (electives)	2-9	s.h.		
	-	Sociology 406 Rural Sociology				
		Soc. Studies 482 Conservation and Rural Economic Life	2	s h		
		Soc. Studies 494 Social Studies and Conservation	. 2	s.h.		
		Geography 420 Field Geography and Conservation	. 2	s.h.		
		Sci. 419 Field Science and Conservation	. 2	s.h.		
		Sci. 411 Problems in Field Science	. 2	s.h.		
v	Pro	ofessional Education and Behavioral Science	2-6	s.h.		
		Research Methods		0.22.		
	Λ,		2	- 1-		
		The second secon		s.h.		
		Ed. 603 Principles and Practices of Research or an appropriate Departmental Research Seminar (required)	2	e h		
	B.			5.11.		
	D.	Social Problems and Education (electives)	2	- 1		
		Sociology 565 Community Resources and Youth Home Ec. 427 The Disadvantaged Family	2	S.n.		
		Geography 421 Population Problems of the World	2	s.II.		

	Sociology Sociology Sociology Sociology	405 Urban Sociology 406 Rural Sociology	2 2	s.h.		
C.	Curricului	m Development (electives)				
	Ed. 530		2	s.h.		
		Curricular Activities	2	s.h.		
	Ed. 538	Curriculum Construction in Elementary Schools	2	s.h.		
	Ed. 539	Seminar in Curriculum Construction	2	s.h.		
D.	Current T	rends and Concerns of Education (electives)				
	Ed. 500	Recent Trends in Secondary School Methods	2	s.h.		
	Ed. 502 Teaching the Block of Time Curriculum in Junior					
		and Senior High School	2	s.h.		
	Ed. 505	The Two-Year College	2	s.h.		
E.	Behaviora	ll Sciences and Education (electives)				
	Soc. Studi	es 563 Social Movements	2	s.h.		

#### **GRADUATE COURSES**

Note: Students are not permitted to enroll in courses they have taken previously under other titles and/or other course numbers.

# Education 500. Recent Trends in Secondary School Methods

This course emphasizes the fundamental principles underlying the technique of teaching on the secondary school level. Some of the topics considered are: organization of knowledge, the logical and psychological aspects of method, developing appreciations, social-moral education, teaching motor control, fixing motor responses, books and verbalism, meeting individual differences, guidance in study, tests and examinations, marks and marking.

# Education 501. Tests and Measurements in Secondary Education 2 s.h.

The purpose of this course is to develop an appreciation of the meaning and importance of measurement in education, and to give a working knowledge of instruments of measurement.

# Education 502. Teaching the Block of Time Curriculum in the Junior and Senior High School 2 s.h.

This course concerns the structure, organization, and methods of teaching block of time curricula in secondary schools, after a discussion of underlying philosophy and historical development.

## Education 503. Methods and Instruments of Research 2 s.h.

This course is required of all regularly matriculated candidates for the Master's Degree without regard to their field of major interest. Its purpose is to introduce students of education to research and its practical application to professional problems. The course treats: the nature and types of educational research; methods and techniques of educational research; and the tools used in interpreting statistical data. During the course, the student completes his outline and may complete his research either in this course, in Education 603, or in his departmental seminar or research course. It is recommended that this course be taken rather early in the graduate program. It must precede work in departmental seminar or research courses. Prerequisite: Math. 320, Educ. 501, or equivalent, and M.A. candidacy. Math. 320 does not carry graduate credit.

#### Education 505. The Two-Year College

2 s.h.

2 s.h.

This course is designed to acquaint the student with the history, purposes, patterns, and trends of the two-year college, including the junior college, the community college, and university extension centers.

## Education 506. Teaching in the Two-Year College

2 s.h.

This course is designed to examine the instructional problems in public two-year colleges as they are affected by: the student population, the curriculum functions, the organization of the program, and the guidance responsibilities of the teacher. Field study visits to nearby two-year colleges are required.

#### Education 509. Medical Problems in Education

2 s.h.

In this course the role of the educator is studied in relation to the following subject areas: childhood, chronic and contagious diseases; nutritional problems; narcotics; and psycho-socio-medical pathologies. The impact of health problems on the family, school, and community is emphasized throughout.

## Education 510. Introduction to Educational Administration

s s.h.

This is the basic course in the organization and administration of the American school system at the national, state, intermediate, and local levels. The purposes and nature of school administration are studied. Other topics surveyed include: the superintendency, personnel problems, records and reports, plant administration, business administration, auxiliary services, administration of curriculum, instruction, guidance, and pupil personnel.

#### Education 511. School Business Administration

2 s.h.

Topics considered in this course include: the role of business administration in public education, office management, budgetary procedures, financial accounting, payroll administration, purchase and supply problems, insurance, debt service management, transportation, and food service. Prerequisite: Educ. 510 or equivalent.

## Education 512. School Community Relations

2 s.h.

This course concerns the relation of the school to other educational efforts of the community. It considers the scope and types of agencies and informal influences of an educational nature, and also the agencies and methods by which the best total cooperative effort can be attained. It deals also with methods and plans of publicity. Constant reference throughout is made to New Jersey localities.

#### Education 514. School Law

2 s.h.

After an introductory general study of such topics as: legal theory, the separation of school government from other local government, the appellate function of the State Commissioner of Education and the State Board of Education, the course is concerned principally with a study of New Jersey school laws (Title 18 of the Revised Statutes) and decisions. Prerequisite: Educ. 510 or equivalent.

#### Education 516. School Finance

2 s.h.

After an introductory unit concerned with the current economic environment, this course is devoted to a study of state and local taxation, state school-aid theory and practice, school-district indebtedness, cost-quality relationships, Federal aid, fiscal controls, and the budgetary process. Prerequisite: Educ. 510 or equivalent.

#### Education 520. Administration of the Modern Secondary School 2 s.h.

The following topics are considered: the student personnel, building and revising the high school curriculum, providing for individual differences, making the school schedule, records, the guidance program, pupil participation in government, the extracurricular program, the health program, the safety program, discipline, library and study hall, cafeteria, the principal's office, and evaluating results. Prerequisite: Educ. 510 or equivalent.

### Education 525. Secondary School Building Planning

2 s.h.

This course deals with the education planning of secondary-school buildings. The preparation of educational specifications and space requirements is considered. Topics considered include the planning of offices, classrooms, auditoriums, gymnasiums, laboratories, shops, libraries, cafeterias, and other spaces. Prerequisites: Educ. 520, 530 or equivalents.

#### Education 530. Curriculum Construction in the Secondary School

The purpose of this course is to consider the extent to which the secondary school curriculum meets the needs of a changing civilization, and to consider effective means of curriculum construction.

### Education 533. Philosophy of Education

2 s.h.

This course acquaints advanced students of education with the main currents of philosophical thought tending to direct education since the turn of the century. It builds a thorough understanding of the James, Peirce, Dewey positions and their critics and interpreters

through the 1930's and 1940's. Post war European and American thought as expressed in philosophy, arts, including literature will aid the student to interpret and weigh contemporary trends and discussions of personal and social values, mainly as they influence American education.

## Education 534. Economic and Political Determinants in N. J. 2 s.h.

This course gives the student a background for interpreting the economic and political forces and trends in the state which have local and state wide implications for all levels of education. Leading state bulletins on these matters are studied, and authorities in the field will be invited to participate. Field trips to industrial and agricultural locations are part of the requirements.

## Education 538. Curriculum Construction in the Elementary School 2 s.h

This course offers an opportunity to review state and city elementary curricula: to discuss the principles of curriculum construction; to collect new teaching materials for the various subjects; and to evaluate, organize, and grade these materials. Teaching procedures in the use of materials are discussed and evaluated in terms of pupil needs, the objectives set up, and the results obtained. This course offers an opportunity to make a special study of the materials and procedures to be used in the supervision of the language arts.

#### Education 540. Supervision of Instruction

2 s.h.

This course covers the principles and techniques of supervision used in elementary and secondary schools. It describes the role of the supervisor in aiding teachers to adjust to the school environment, and overcome certain personal weaknesses that lower their effectiveness in the classroom. It alerts the student to ways of challenging teachers to new and more varied improvements in teaching methods. It also describes the problem of organizing and administering curriculum changes. The stress is on creating a professional atmosphere of growth for all concerned with instruction.

#### Education 541. Supervision in Special Fields

2 s.h.

This course directs the student to the special problems of supervision in a particular subject area at the secondary school level, or to the problems of general supervision at the secondary or elementary school level. Where special supervision activities relating to age groups, materials of instruction, or professional growth and evaluation are unique for the subject area, specialists in these fields will be used as instructors. (Supervision courses offered in other departments may be substituted for Ed. 541.)

# Education 550. Guiding the Reading Interests of Secondary School Students: Part I. Materials and Sources 2 s.h.

# Education 551. Guiding the Reading Interests of Secondary School Students: Part II. Needs and Services 2 s.h.

The purpose of these courses is to prepare teachers to discover and improve the reading interests and attitudes of their students. Useful to all content area teachers and specialists who assign recreational and research reading, Part I particularly deals with fundamental bibliographical tools, the classroom teacher's relationship to the library, current source materials in book evaluation, and techniques for determining book selection. In Part II the teachers write their own book annotations and reviews, establish readability and suitability criteria based on a growing knowledge of child development, help build collections and services for young people which meet their personal needs through reading. (Educ. 550 not open to those who have taken Eng. 547; Educ. 551 may be taken as Part II after Eng. 547.)

## Education 551N. Organization and Administration of Reading Programs 2 s.h.

This course is designed to acquaint the student with the more complex aspects of organizing and administering reading programs. It includes such topics as: theory and techniques of leadership, program development, organization of in-service programs, developing a budget, methods of evaluation, etc. In general, this course is aimed at providing essential background for reading specialists to establish or administer a functional secondary school reading program.

# Education 552. Principles of Reading Improvement in the Secondary School 2 s.h.

This is a course planned to present a deeper picture of the guiding principles and controversial issues which influence the teaching and learning of reading. Organized especially for the subject area teacher and the beginning reading specialist, recent non-clinical research and important professional and lay journals are studied to explore the pendulum of theory and practice in: the organization and administration of developmental reading programs, educational policies which affect reading, child development concepts and reading growth, systematic differentiation of individual needs, and reappraisal of the place of reading in our changing society. (Not open to those who have taken Educ. 556.)

# Education 553. Techniques of Reading Improvement in the Secondary School

This is a practical course dealing with popular techniques useful in the improvement of non-clinical reading difficulties found in the content subjects. Planned especially for the subject area teacher and the beginning reading specialist, a study is made of secondary school reading needs, and specific suggestions are outlined for guiding the slow, average, and gifted student to success in reading up to his capacity in a classroom situation. Through an actual study of the more widely used reading workbooks, films, slides, tachitoscopic instruments, and texts available in the Reading Laboratory facilities, a practical approach is made to building repertoire of reading skills in many areas. (Not open to those who have taken Educ, 430 and 557.)

## Education 554. Case Studies of Reading Difficulties: Part I. Testing 2 s.h.

## Education 555. Case Studies of Reading Difficulties: Part II. Treatment 2 s.h.

These are the basic courses in learning to use diagnostic materials and learning to write up diagnostic findings. In Part I after making a thorough study of the most frequently used current test instruments and inventories, each teacher applies this knowledge to the actual testing of a child with reading problems. Particular attention is given to the unique values of group and individual tests, survey and diagnostic tests, and standardized and informal tests. In Part II the class learns to interpret test data. Practice in case reporting to parents, schools, and agencies is undertaken. (Educ. 554 not open to those who have taken Eng. 430; Educ. 555 may be taken as Part II after Eng. 430.)

## Education 556. Corrective and Remedial Reading: Part I. Causation 2 s.h.

## Education 557. Corrective and Remedial Reading: Part II. Treatment 2 s.h.

These are causation and treatment courses planned for the teacher and specialist who are involved in some aspect of remedial instruction in reading improvement. Part I offers an opportunity to extend training by investigation and interpretation of the more serious reading problems. A study is made of the constellation of causes of reading difficulties, and techniques of remedial and corrective treatment are projected. In Part II particular attention is paid to the selection and adaptation of suitable improvement devices and curriculum materials. Illustrative cases are drawn from actual clinical experiences by requiring participation in the program of the Reading Laboratory. (Educ. 556 not open to those who have taken Educ. 530A, 558; Educ. 557 not open to those who have taken Educ. 530B and 559.) Prerequisite: Permission is needed to take these courses.

#### Education 558. Field Experience in Reading

2 s.h.

The aim of the course is to introduce the student to various aspects of reading through experience in agencies actually dealing with such problems. Students observe and participate in activities of the agencies to which they are assigned and write full accounts of these observations and experiences. Prerequisites are: experience in teaching, familiarity with literature on all aspects of reading and psychology, Education 552, and permission of instructor. The hours for the conferences are arranged personally by student and instructor.

#### Education 577. Social Case Work

2 s.h.

This course reviews principles in social case work as they relate to the school setting. Study is devoted to the theoretical development of social work norms, and to the function and role of the school social worker (visiting teacher). Cases which have been developed by Social Workers will be studied and experiences in a school setting will be provided.

#### Education 580. Principles of Guidance

2 s.h.

Topics included in this course cover: philosophy of guidance, history of the guidance movement, the need for guidance presented by children and adolescents. The methods of gathering useful data are studied, and school records, exploratory activities, tests, inventories, the case study approach, occupational information, and occupational data are treated as well as general methods of guidance with special stress on interviewing and counseling of students.

## Education 582. Vocational Guidance

2 s.h.

This course is intended for counselors in the junior and senior high schools to obtain information about the principles and philosophy of vocational education and the techniques of counseling youths who wish to receive pre-employment training, and for counselors of out-of-school groups who are attempting to make readjustments to occupational life. Attention is also given to guidance techniques for job preparation and readjustment, the matching of educational and personal abilities to job specifications, the effects of social legislation on the employment of youths, and a study of techniques used in determining occupational needs and occupational changes, Prerequisite: Educ. 580.

#### Education 583. Educational Guidance

3 s.h.

This course is concerned with the facilities available for education after high-school graduation, the problem of further training for pupils leaving school before completing high school, and the academic problems of students while in school. A brief survey of colleges and college-admission procedures is made. Prerequisite: Educ. 580.

#### Education 585. Group Guidance and Counseling Activities

3 s.h.

3 s.h.

This course is concerned with the various techniques for helping 3 individual pupils and for using group activities including role-playing as a guidance technique. The group activities considered include those of home rooms, activity periods, occupation courses, student field trips, placement follow-ups, college nights, and career days. Prerequisite: Educ. 580.

#### Education 586. Elementary School Guidance and Counseling

This course is designed for guidance counselors in the public schools with particular emphasis on the guidance services that may be offered in grades kindergarten through six. The guidance program, as established in the public schools, envisions supervision and administration of the guidance program from the kindergarten through graduation at grade twelve. It is important, therefore, that the guidance director understands the services that can be made available to the elementary school. Prerequisite: Educ. 580.

## Education 587. Administration and Supervision of Guidance Programs 3 s.h.

This course is designed to acquaint the student with more complex aspects of the supervision and administration of a guidance program. It includes such topics as: developing and administering programs of student registration (course selection); theory and techniques of scheduling a modern high school; supervisory responsibilities of the director of guidance within and outside of the department; coordinating guidance activities in a multi-school district, etc. In general, this course is aimed at providing essential background for counselors desiring to establish or administer a guidance program in a high school or a multi-school system.

The primary method of study is the examination and evaluation of current guidance practices leading to the formation of proposals for improvement, and possible inclusion, in guidance programs where the student is working as a counselor and/or director. Prerequisite: Education 580 and 6 s.h. in the Guidance Program of the Student Personnel Services M.A. Degree program.

#### Education 588. Techniques of Interviewing and Counseling

2 s.h.

This is an advanced techniques course in the counseling of individual students. The directive, non-directive, clinet-centered, and role playing approaches, as well as the case study methods are studied. Opportunity for demonstration and practice with these techniques are implemented with tape recordings, one way screens, and closed circuit television. Prerequisites: 12 s.h. of work in the M.A. program and permission of the faculty advisor.

#### Education 589. Student Personnel Services in Higher Education 3 s.

This course is a study of the student personnel functions in two-year and four-year colleges. The areas to be included are: personal counseling, financial aid, dormitory management, health program, student activities and social programs; course selection, job placement, college admission and academic retention, administration and supervision of the program.

#### Education 595A, 595B. Foundations of Education: Part I and II 3 s.h. each

This course is organized in terms of current educational issues and topics of interest. It is designed to provide the student with an understanding of the historical, philosophical, and social backgrounds to which an educational item is related and from which it may have evolved. It includes those elements of educational philosophy, educational sociology, and history of education which may be pertinent to the current problem and which will provide the teacher with the necessary perspective to deal with it in an intelligent manner. The topics included in the course are selected in such a way that a large number of basic concepts will be involved.

This course is organized in two parts, three semester hours each, of which either part may be taken prior to the other or concurrently with it.

(Open to M.A. [major in Teaching] and certification students only.)

#### Education 595C. Structure and Organization of American Schools 3 s.h.

This course provides a basic orientation in the following areas of professional concern: (1) The organization and role of the public schools in American Society, (2) The responsibility of Federal, State, and Local Governments for the education of youth, (3) The nature of teaching as a profession, (4) The evolving role of the school in community improvements, and (5) current school practices.

(Open to M.A. [major in Teaching] and certification students only.)

#### Education 595D. Curriculum and Methods of Instruction

3 s.h.

An overview of curriculum is provided. Insight into the role of the teacher in the teaching-learning process is developed. The routine activities and auxiliary responsibilities of the teacher are examined. Students learn about the sources of curriculum materials, and the selection and use of teaching aids. Lesson plans and units of work are prepared for use in the classroom. Through cooperative and/or team teaching, instructors from various college departments assist prospective teachers with specific methods of teaching.

(Open to M.A. [major in Teaching] and certification students only.)

#### Education 595E, 595F. Supervised Teaching Seminar

4 s.h. each

This seminar is provided for in-service teachers employed on an emergency or provisional certificate and is open to students participating in the "approval" certification program or the Master of Arts in Teaching Program. Arrangements are made with the employing Superintendents of Schools for joint supervision of the in-service teacher by local school and Coilege officials. The student will assume full teaching responsibilities and will meet periodically at the College for a complete academic year.

In this seminar students have an opportunity to examine their teaching materials and techniques and to share their experiences with other beginning teachers. Cooperating local school personnel and supervising instructors assist the new teachers with their on-the-job problems.

(Open to M.A. [major in Teaching] and certification students only.)

#### Education 595G. "Action Research" for Teachers

3 s.h.

This course is designed to provide teachers with an understanding of the basic principles and techniques of research which are applicable to their classroom situations. Examples of various kinds of classroom research, both of an individual and group nature, are studied and analyzed. Practice is provided in the planning and outlining of specific research projects, the development of experimental designs, and the evaluation of the structure and outcomes of classroom research. Each student develops, in detail, a plan for a research project which he might be interested in undertaking in his own classroom.

(Open to M.A. [major in Teaching] and certification students only.)

# Education 595H. The Teaching of Communication Skills

3 s.h.

The role of communication skills is of major importance in the learning process. Every teacher should be aware of the abilities, limitations, and needs of students in this area, the adaptations that must be made in curricula, assignments, and classroom procedures to the levels of the students in a classroom, and the remedial measures that might be taken to improve their status. These communication skills include the specific areas of speaking, listening, reading, and writing. Instructors from the departments of Speech, Reading, and English are involved in this course. The endeavor is made to have the students gain an understanding of the basic principles in each of these fields and their relationship to the teaching of any subject.

(Open to M.A. [major in Teaching] and certification students only.)

#### Education 601. Workshop in Education

2 or 4 s.h.

Section A — Administration

Section B - Supervision

Section C - Curriculum

Section D - Guidance

Section E - Psychology

The workshop course enables the graduate student to devote his time to an educational topic or school problem of current interest to him and to secure the help of the staff, fellow students, and college facilities in pursuing this study. Members of the workshop may meet together to discuss matters of common concern in respect to the current school situation. In addition, the student works independently on his own subject and at times meets with a small group interested in the same area.

In the past, students have worked on topics in such areas as these: problems in administration, guidance programs, extracurricular activities, school philosophies, problems in supervision, curriculum planning, and community relations. The success of the workshop depends much upon the student knowing what he wants to accomplish; the procedure being flexible enough to support his purposes. He must have his proposed problems for study approved by the Director of the Workshop before he enrolls for the course.

The workshop is divided into five sections, as noted above. The student may enroll for four semester-hours of credit or for two, the four calling for two periods of scheduled time in the course daily, the two calling for one period of scheduled time in the course. The student taking the course for two credits enrolls for one of the five fields. The student taking it for four credits may do all the work in one of these five fields, or he may enroll for two hours of credit in one and two in another.

#### Education 602. Research Seminar in Guidance

2 s.h.

This course is designed to provide a laboratory situation for the exploration and study of present practices in student personnel work. The major portion of time is spent in private investigation and research. Frerequisite: Education 580, 503 and 10 semester hours graduate work in the Student Personnel Services Program.

## Education 603. Principles and Practices of Research

The purpose of this course is to give students an opportunity to collect, analyze, and interpret data; to state the findings; to draw conclusions and generalizations; to write a research report together with an abstract; and to give an oral report.

This is an elective course in educational research. It may be substituted for a departmental research seminar upon the approval of both the departmental advisor and the chairman of the Education Department.

#### Education 604. Field Work in Guidance

2 s.h.

The aim of the course is to introduce the student to various aspects of guidance through experience in agencies actually dealing with such problems. Students observe and participate in activities of the agencies to which they are assigned and write full accounts of these observations and experiences. Some time is spent in discussing and evaluating these experiences and relating them to the literature of the subject. Prerequisite: Education 580 and 10 semester hours graduate work in the Student Personnel Services program.

## Education 605. Research Seminar in School Social Work (Visiting Teacher)

2 s.h.

This course will provide research tools to enable the student to construct and implement an original inquiry that shall be deemed by the instructor to be a singular contribution to the field. (prerequisite: Ed. 503)

#### Education 606. Practicum in Guidance Services

2 or 4 s.h.

This course is designed to be a final summation of the counselor's preparation. It includes: investigation of programs in practice; development of guidance programs to meet specific school needs; evaluation of student personnel services. Prerequisite: Completion of a minimum of 20 s.h. in the Student Personnel Services program.

## Education 607. Field Work in School Social Work (Visiting Teacher) 2 s.h.

The student will be provided with an opportunity to participate in school social work in an actual school situation. Diagnostic skills, interviewing techniques, case recording, individual and group therapy and the team approach will be observed and discussed. Under the guidance of a certified, experienced school social worker, the student will develop an understanding of the use of community resources. The student will be given an opportunity to observe special services (school social worker, psychologist, psychiatrist, speech or reading specialist, and teacher) in action as together a therapeutic plan is developed for the school pupil.

## Education 628. Field Experience in Administration and Supervision 2 s.h.

Students are assigned to a particular junior or senior high school, where under the guidance of a school administrator or supervisor they carry out certain functions of these positions. A college staff member acts as coordinator and supervisor of this activity by visiting the school and consulting with the student, observing him, in action and plans with the school personnel for improvement and evaluation of the students work.

# Education 629. (529) Research Seminar in Secondary School Administration

2 s.h.

In this course the class makes an intensive study of administrative and supervisory problems suggested by the educational events and trends of the year, by the interests and responsibilities of the members of the class, and by educational movements in New Jersey and the country. Each student does an individual piece of research which he reports to the class. This represents advanced work which depends upon previous study or experience in educational administration or supervision. Prerequisites: Educ. 503, 520 and 540 or equivalents.

#### Education 639. (539) Research Seminar Curriculum Development 2 s.h.

This course is for students actively engaged in problems of curriculum reconstruction and for those who are anticipating committee work in this field. It concerns both the elementary and secondary levels. Each student does an individual piece of research which he reports to the class. This represents advanced work which depends on previous study in the curriculum area. Prerequisite: Educ. 503, 530 or 538.

## Education 659. Research Seminar in Reading

2 s.h.

The course is designed to provide a laboratory situation for the exploration and study of problems in the field of reading that have been suggested by the educational events and trends of the year, by the interests and responsibilities of the members of the class, and by educational movements in New Jersey, the country, and the world. Each student will execute an individual research effort which he reports to the class.

## SENIOR-GRADUATE COURSES

Most of the following courses are set up to serve graduate students as well as College seniors. To carry graduate credit, the course in question must be approved by the candidate's advisor.

#### Education 403. Supervised Student Teaching

8 s.h.

Ten weeks of student teaching in the public schools of New Jersey. The purpose of student teaching is to give the student an opportunity to relate theory to practice under skilled supervision; to offer a chance to evaluate his own strengths, weaknesses, and personal and professional needs; and to determine his readiness for responsible membership in the teaching profession.

## Education 406. Educational Sociology

3 s.h.

This course deals with the application of sociological principles to educational problems. The school is treated as a part of the community, and the various social forces that affect the school and its administration are considered. The following topics are included: family backgrounds, community organization, social breakdown, social mobility, socialized classroom methods, and the social approach to individual behavior difficulties.

## Education 408. Selection and Utilization of Audio-Visual Materials 2 s

Sources, selection, and evaluation of audio-visual aids are studied in this course. Techniques in developing individual reference catalogs of audio-visual aids are stressed. The production of school-made aids is also an important aspect of the course. The use of the latest audio-visual equipment is demonstrated.

#### Education 409. Radio and Sound Equipment in the Classroom

2 s.h.

This course trains teachers and school executives in the use of radio programs, amplifying systems, recording equipment, and record players. Actual practice is given in the use of these educational aids. Problems of script-writing, microphone and recording techniques, and program directing are considered. The class visits radio stations for equipment and program observation. Each student develops a teaching unit using radio or sound equipment to vary, vitalize, and improve educational practices.

#### Education 410. Teaching Materials Workshop

2 s.h.

This course is for those persons who wish to study advanced problems in the utilization and administration of audio-visual materials. Individual research is stressed, and there is an opportunity to work out individual projects. Such problems as budget requirements, administrative set-up, establishment of film libraries, etc., are emphasized. It is assumed that the student will have taken Educ. 408 or will have had the equivalent in practical experiences.

#### Education 412. Seminar and Practicum in Adult Education

3 s.h.

This course is designed to develop awareness, skills, and understandings in the teaching of adults, with particular attention focused upon working with the educationally disadvantaged young and older adult. Through lecture-discussion, demonstration, and practicum experience, the course participant will be able to become more aware of the developing new approaches to guiding learning experiences for the adult.

#### Education 430. Interaction Analysis

3 s.h.

This is a course in the investigation of and experience in the problem of objectifying observable pupil-pupil-teacher relationships during the teacher-learning process. Students will develop skill in analysis through use of tapes and observation of elementary and secondary classes.

## Education 431. Individual and Group Dynamics

3 s.h.

This course is a seminar laboratory experience designed to meet the needs of teachers, administrators, and supervisors in the areas of self understanding and effective human relationships. Focus is on individual behavior in learning groups and in supervisory conferences. Participation in actual group process provides opportunity for development of insight into the effects of one's behavior on others.

## Education 440. Camping and Outdoor Education

2 s.h.

The purpose of this course is to familiarize the students with camping and outdoor education as educational methods utilized by the schools of America. The aims and methods of camping are studied, and consideration is given to the communities that have active camping and outdoor education programs in operation. The course also helps prepare the student for a position in summer camps. This course is usually given at the New Jersey State School of Conservation, Stokes State Forest.

#### **Education 441. Conservation Education**

2 s.h.

This course is designed to give teachers and prospective teachers a background for organizing and teaching conservation on various grade levels. The need for conservation, the various kinds of natural resources, and some of the modern methods for using and renewing these sources are considered. Field trips, laboratory experiences, visual aids, printed materials, and visiting specialists combine to make this a useful introductory course for all teachers.

#### Education 442. Practicum in Camp Leadership

2 s.h.

In this course the student has an opportunity to learn the techniques of camp leadership through practical experience, guided group study, and discussion. The practical experience comes through serving as a camp counselor in an actual camp situation. During this practical experience there are regular discussion sessions and assigned readings which help the student to gain a background of knowledge to help deal with the practical problems as they arise.

#### Education 443. Practicum in Camping Education and Administration 3 s.h.

This course is designed to provide practical experience in the identification and solution of problems arising in camp administration. Among the phases considered are discussion of current practices at both private and institutional camps. Interpretation of educational philosophies and objectives as they relate to camping, finances, personnel selection, waterfront organization, food purchasing, staff supervision, sanitation, health and safety, camp management, records and reports, insurance, kitchen management, maintenance, and other phases of camp administration. Practical application is provided through the techniques used in the children's demonstration camp. Prerequisite: Educ. 440 or permission of advisor.

#### Education 444. Practicum in Conservation Education

2 s.h.

This course is designed to provide teachers and supervisors with a background of experience and knowledge which will enable them to organize and to conduct conservation education programs in their own communities. Using an extensive library of conservation educational material, students formulate teaching units, lists of teaching aids, and projects suitable for use in their own communities. Participating in conservation projects with the children in the demonstration camp furnishes a practical background for research and discussion. Prerequisites: Educ. 441, Science 412, Science 413, or the equivalent.

#### Education 451. Guidance for the Classroom Teacher

3 s.h.

This course is designed as an introduction to the field of guidance for teachers who are concerned with problems of guidance and human relations in the classroom. This course is also designed to give the new teacher a picture of the place of guidance in the modern school, to indicate what guidance is and what is not, to indicate the techniques by which guidance is accomplished, and to identify some of the tools of the guidance counselor. (Cannot be used for credit toward the Master's degree in Student Personnel Services.)

#### Education 461. The Junior High School Curriculum

3 ch

Recent trends in the development of the junior high school curriculum and the relation of the curriculum to the aims, function, and organization of the junior high school are covered. Curriculum patterns in representative junior high schools are studied and evaluated. An opportunity is given to each student to develop units of work for junior high school subjects in the major of his choice.

#### Education 462. Survey of Reading Methods in Secondary School Subjects 3 s.h.

Planned especially for the inexperienced teacher in all subject matter areas, this introductory course outlines the role good reading plays in achieving both academic and personal success in every aspect of school life. New teachers will want an overview of: the physiological, psychological, and sociological factors in reading; resources available to the reading-minded teacher; and the school's responsibility for helping the student build an inventory of reading skills by utilizing reading opportunities in the entire curriculum.

## Education 463. Reading and the Improvement of Study Skills

3 s.h.

This is a course in "How to Study" designed to prepare teachers to help junior-senior high school students achieve greater effectiveness in their reading-study habits. After examination of recent materials and research the class develops a series of practical methods for teaching and learning: the SQ3R approach, the best methods for taking examinations, the application of reading to problem solving, the development of memory and concentration, and the various techniques for taking and organizing reading notes, and the reading of homework assignments.

## Education 464. Foundations of Reading Instruction

3 s.h.

Good first reading is of primary importance in the sequential development of reading skills which extend into the junior and senior high school. In this course methods and materials currently in use in elementary reading programs are studied with a view toward increasing the power of both the teacher and the learner. How the reading process begins, and how it is reinforced are topics fundamental to all upper grade teachers who are faced with the problem of continuing reading skills development in all curriculum areas.

## Education 465. College Reading and Study Improvement Laboratory 3 s.h.

This workshop course is designed for those college students who feel that reading-study problems are interfering with their normal school progress. Students engage in supervised practice experiences which promote vocabulary growth, more flexible reading speeds, comprehension and recall improvement, skimming competency, and better interpretative and critical reading techniques. Particular attention is given to reviewing for examinations, keeping up with daily reading assignments, taking notes, and organizing the reading content into main and sub-topic structure. Students may volunteer for this course or be recommended by a faculty member.

# Education 466. Diagnosis and Treatment of Secondary School Reading Problems

3 s.h.

This is a course designed to introduce teachers to the problems of the handicapped reader. Following an examination of recent materials and research, the class develops a representative repertoire of methods for evaluation and correction. Prerequisites: Educ. 464 or equivalent.

#### Education 480. Field Science for Elementary Education

2 s.h.

Working in a natural setting, rather than an artificial laboratory, this course stresses first-hand experience with natural phenomena and suggests what can be done to convey an understanding of these things to the elementary school student. In developing an understanding of natural resources consideration is given to such areas as rocks and minerals, plant and animal life, astronomy, weather, and all outdoor phenomen, both physical and biological. If desired, collections are made under supervision and some latitude is provided for individual specialization in some phase of field science. The student needs no formal scientific background for this course. Methods of teaching on the elementary school level as well as subject matter content are included. Simple demonstrations, experiments, collections, acquisition of free and inexpensive materials, reference publications, and the most recent methods and trends in field trip procedure are considered.

#### Education 492. Comparative Education

3 s.h.

The educational systems of Europe, Asia, Africa, and Latin America are studied in an attempt to gain insight into the essential qualities of American education. In this process the relationship between the educational system of each culture and its history, economy, and political and social organization should emerge. Factors causing progress and change in education since 1900 are observed.

#### Education 493. Recent Trends in European Education

6 s.h.

This is a field-study course covering a period of approximately six weeks of seminars and of observation and visitation to school systems in Western Europe. Present educational policies and practices in selected European countries are studied with particular reference to economic, political, and social forces shaping their cultures. Similarities and contrasts among European and the American educational systems are analyzed.

# DEPARTMENT OF ENGLISH

Graduate Advisor: Dr. Harold C. Bohn (on leave Fall Semester)
Mr. James P. Pettegrove, Acting

Graduate study in the Department of English is designed:

- 1. To broaden the understanding and appreciation of the culture of the Western World through extended study of the literature of Great Britain and the United States, of those European nations which have contributed much to our American heritage, and of those Oriental and other nations now exerting an increasing influence upon the modern world.
- 2. To examine the function of English language communication in the modern world through study of its historical development, its psychological nature, its critical expression, and its practice in the language arts.
- To enrich the professional background of English teachers through investigation of research and experimentation designed to improve instruction in English in the secondary school.

#### REQUIREMENTS FOR THE M.A. DEGREE IN ENGLISH

# **Admission to Program**

461, 462.

A student with an undergraduate major or minor of at least 24 semester hours in English is admitted subject to general College graduate admission requirements as stated elsewhere in this catalog.

- I. General Education (see Master's Degree Program Pattern) 6-12 s.h.
- II. Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h.
- III. Specialization 11-20 s.h.
  A. American Literature 2-4 s.h.

From the following courses: Eng. 525, 529, 533, 537, 538, 543, 546A, 546B, 546C, 546D, 441, 442, 461, 462.

- B. English Literature 4-6 s.h. From the following courses: Eng. 501, 502, 503, 504, 506, 508, 509, 510, 518, 521, 524, 531, 532, 535, 540, 544A, 544B, 544C, 422, 423, 431, 433, 441, 442, 461, 462.
- C. World Literature 2-4 s.h. From the following courses: Eng. 500, 511, 513, 514, 520A, 520B, 522, 526, 527, 528, 530, 534, 536, 539, 548, 453, 454,
- D. Language and Communication 2-4 s.h. From the following courses: Eng. 507, 512, 516, 517, 523, 541, 408, 409, 419.

In addition to or in lieu of English courses in Language, courses in Speech (Speech: 550, 565, 410, 435, 448, 449, 456, 461A, 461B, 462, 466, 468 and/or courses in Reading Educ.: 550, 551, 552, 553) are acceptable, especially if the candidate wishes to augment his skill as teacher of Speech or Reading along with his English teaching.

# E. English Research Writing

2 s.h.

English 603 is required of all candidates for the degree. The subject of the research will determine the area of specialization (American Literature, English Literature, World Literature, Language and Communication) to which this course is assigned for credit.

## IV. Comprehensive Examination

To receive the degree of Master of Arts in English, each candidate must pass a written comprehensive examination in March before the granting of the degree at the June Commencement or in October.

This examination is designed to test the candidate's mastery of the History of Literature, the techniques of literary expression, technical matters of writing, and Linguistics. He will also be expected to have a knowledge of the professional skills needed to teach these various aspects of English.

This mastery is partly obtained from the courses taken leading to the degree; largely, however, the candidate must assume the responsibility of preparing himself independent of courses. He is expected to keep informed about current literary and teaching items of importance.

Sufficient choice is provided so that each candidate should be able to find a sufficient number of questions related to his complement of courses to meet the required number of answers.

Each candidate who has declared to the Graduate Office his readiness to take the examination, given only once a year in the Spring Semester, will be notified of date, time, and place.

Minimum: 32 s.h.

#### **GRADUATE COURSES**

# Eng. 500. Greek Classical Drama

2 ch

All of the extent plays of Aeschylus, Sophocles, Euripides, and Aristophanes are studied in detail. Attention is devoted to usage of Greek mythological material, to dramatic structure, and to the philosophy of each author.

#### Eng. 501. Anglo-Saxon

2 s.h.

Both the literature and the language of the Anglo-Saxon era are stressed. Specimens of alliterative poetry, including excerpts from Beowulf and of religious prose and The Anglo-Saxon Chronicle are read as literary art and as milestones in the history of English writing. Structure and vocabulary are investigated as the pedestals upon which rests the edifice of modern English.

#### Eng. 502. Victorian Poetry

2 s.h.

The most important English poets who wrote during the transition from the Victorian to the modern period are read, analyzed, and discussed: Rossetti, Swinburne, Hardy, Bridges, G. M. Hopkins, Francis Thompson, A. E. Housman, Kipling, and Yeats.

#### Eng. 503. Geoffrey Chaucer

2 s.h.

Some of the works of Chaucer are studied intensively, while others are read rapidly, so that the student may acquire a broad general understanding of Chaucer's place in the history of English literature as well as facility in reading and interpreting the medieval text.

#### Eng. 504. Elizabethan and Jacobean Dramatists

2 s.h.

This course deals with the men who inspired and rivaled Shakespeare, Marlowe, Dekker, Chapman, Jonson, Beaumont and Fletcher, Webster, and Ford are read for their own sakes and for the light they throw upon Shakespeare.

#### Eng. 506. John Milton

2 s.h.

The understanding and evaluation of Milton's poems are primary aims. Contributory are the following: Milton's literary heritage and influence, his position of leadership in the Puritan struggle for civil and religious liberty as revealed in his prose writings, and biographical materials.

## Eng. 507. Critical Writing

2 s.h.

This course is primarily an examination of critical articles relating to major literary figures. Besides reacting to these examples of literary opinion and scholarship, students are asked to develop a consistent set of critical principles and to apply these to the work of some outstanding author. Prerequisite: Ed, 503 when substituted for Eng. 603

#### Eng. 508. English Renaissance Non-Dramatic Poetry

2 s.h.

Poetry from Skelton through the Metaphysical poets is studied. Attention is given to sonnet sequences, broadside ballads, miscellanies, and prosody.

#### Eng. 509. English Prose Writers of the Nineteenth Century

2 s.h.

Influential prose writers of the nineteenth century, such as Carlyle, Macaulay, Ruskin, and Arnold are examined in detail. Their effect on the intellectual temper of the century is emphasized.

#### Eng. 510. Samuel Taylor Coleridge

2 s.h.

Since Coleridge reflects all the cultural currents of the Romantic era, this course approaches the aesthetic and intellectual life of that age through the poems, essays, lectures, philosophical writings, and letters of Coleridge. It also considers portions of the vast body of Coleridge scholarship.

#### Eng. 511. The History of Literary Criticism

2 s.h.

Great critics from Aristotle to I. A. Richards and T. S. Eliot are reviewed. Four major critical orientations are explored to bring modern criticism into focus.

## Eng. 512. The Growth and Structure of the English Language

2 s.h.

Concerned with the historical background necessary for an understanding of the English language as it is spoken and written today, the course emphasizes the following areas of study: the nature and origin of language; the ancestry of English; the early growth of English; sources of the vocabulary and the making of words; changing meanings and values of words; syntax and usage; concern with dictionaries, spelling, pronunciation, variations, and standards in the modern period.

#### Eng. 513. The Renaissance

2 s.h.

This course deals with Petrarch and the Humanists; Boccaccio and the Novelle; Machiavelli and The Prince; Cellini and the Autobiography; Castiglione and The Courtier; Boiardo, Pulci, Ariosto, and the romantic epic; the drama; Rabelais and Gargantua and Pantagruel; Ronsard and the French Pleiade; Cervantes and Don Quixote; the art of DaVinci, Botticelli, Michelangelo, Raphael, Titian, and others; and the House of the Medici, Savonarola, the Popes.

#### Eng. 514. Origin and Development of the Arthurian Legend

2 s.h.

This course deals with the vague and tentative beginnings of the Arthur story in early chronicle legend; with Geoffrey of Monmouth's pseudo-historical and Chretien de Troye's romantic treatments; with the great medieval recapitulations of Gottfried von Strassburg, Wolfram von Eschenbach, and Sir Thomas Malory; with the Victorian retellings of Tennyson, Arnold, and Morris; with the musical adaptations of Wagner; and with the modern versions of E. A. Robinson. It includes a detailed history of the development of the legend in its diverse forms.

## Eng. 516. Language Problems in the English Curriculum

2 s.h

The purpose of this course is to enrich the student's sensitivity to an understanding of language. Theories of language and the cultural histories of words are reviewed and applied to the problems of reading, composition, and speech. The course is conducted as a seminar.

#### Eng. 517. Recent Research and Experiment in the Teaching of English 2 s.h

Recent experiments in methods of teaching English, and current research in the fields of language, literature, and composition are examined and evaluated. The purpose of this examination is to throw light on problems of teaching English in the secondary school, and to indicate the helpfulness of trends and developments.

#### Eng. 518. The Major Romantic Poets

2 s.h.

The poems of Wordsworth, Coleridge, Byron, Shelley, and Keats are emphasized. Pre-Romantics—Blake, Burns, and Scott—and minor Romantics are considered. Poetic theory as enunciated by the poets themselves is studied.

#### Eng. 520A and 520B. Great Books on Education

2 s.h. each

Students examine the classics dealing with educational theory and practice which they so often read about but rarely consult.

Part A deals with Plato's Republic, Xenophon's Cyropaedia, Cicero's De Oratore, Castiglione's The Courtier, Machiavelli's Prince, Rabelais's Abbey of Theleme, Ascham's Schoolmaster, Bacon's Novum Organum, Defoe's Projects, Milton's To Samuel Hartit on Education.

Part B deals with Rousseau's Emile, Byron's Don Juan, Hughes' Tom Brown's Schooldays, Newman's Idea of a University, the Arnold-Huxley debates, and the works of John Dewey and Jacques Barzun.

This course is recommended for graduate students in the Department of Education.

#### Eng. 521. English Literature of Social Problems

2 s.h.

Social problems implicit in all literature are considered. Special emphasis is placed on authors who were keenly aware of the social implications of their work. Langland, Chaucer, Shakespeare, Jonson, Milton, Swift, Fielding, Smollett, Dickens, Carlyle, Galsworthy, Wells, and Shaw are among the writers read and discussed.

# Eng. 522. Contemporary European Literature

2 s.h.

"Contemporary" is here defined as the period from the end of World War I to 1960. The great writers on the Continent, of this period—Gides, Proust, Mann, Kafka, with others—will be read extensively, and discussed intensively.

# Eng. 524. Contemporary British Literature

2 s.h.

Important British literary contributions since 1945 are studied, as they reflect recent history, trends and philosophies. Included are writers such as C. P. Snow, Joyce Cary, George Orwell, William Golding, and Iris Murdoch.

# Eng. 525. The Development of the American Novel

2 s.h.

The American novel from 1789 to the present is examined. Beginning with the novels of the early Nineteenth Century, the course traces the rise and development of the Romantic and Realistic novel and concludes with an example of American Naturalism. Written criticism of five novels is required.

#### Eng. 526. Theory of the Novel as a Literary Form

2 s.h.

Henry James said: "The novel is the most prodigious of literary forms." Yet only beginning with himself, about 1880, did a systematic treatment of the origin, development, and craft of the novel begin to appear. Criticism today is doing for the novel what Aristotle's Poetics did for Greek tragic drama, and what Coleridge and Wordsworth did for modern poetry. Prerequisite: A course in the History of the Novel.

#### Eng. 527. The Major Philosophies of Life

2 s.h.

Man's cultural evolution reveals six or seven basic philosophies of reality and life. Illuminating correlations between individual temperaments, cultural epochs, and styles of living, will be shown. Designed to stimulate the student to apply discussions and readings to his own life and culture.

#### Eng. 528. New Perspectives in World Literature

2 s.h.

Literatures of the Orient, the Middle East, Africa, and South America are read and interpreted in relation to Western World Literature to create a world perspective through understanding of the interrelations of literature.

#### Eng. 529. The Development of American Poetry

2 s.h.

A survey is made of the complete sweep of American poetry from the earliest times to the present. Attention will be given to all major patterns, movements, and other literary developments.

#### Eng. 530. Dante and His Influence in England and America

2 s.h.

Fully two-thirds of this course is devoted to rereading and reassessment of Dante in English translation. When Dante's meaning has been revealed, his continued influence from Chaucer through Sackville, Spenser, and Milton to Rossetti, Longfellow, and T. S. Eliot becomes the subject of investigation.

#### Eng. 531. Seventeenth Century English Literature

2 s.h.

The style and content of such prose writers as Bacon, Burton, Walton, Hobbes, Bunyan, Pepys, and Dryden are investigated. Similarly, the poetic expression of experience in Donne, Jonson, Herbert, Herrick, Cowley, Vaughn, Suckling, Lovelace, Waller, and others is studied.

# Eng. 532. The Victorian Novel

2 s.h.

The novel of Victorian England is studied intensively. A review of the development of the English novel before this period is followed by studies in the works of Dickens, Thackeray, Eliot, Trollope, Meredith, and Hardy. Special attention will be given to novels suitable for high school study.

# Eng. 533. Masters of American Literature

2 s.h.

Significant American writers, such as Bryant, Emerson, Franklin, Howells, Irving, Melville, Poe, Twain, and Whitman, are studied to discover their contributions to American life and to reveal important forces in our national background.

#### Eng. 534. Medieval Epic, Saga, and Romance

2 s.h.

The chief medieval epics, sagas, and romances translated into modern English from the literatures of England, France, Germany, Ireland, Iceland, Wales, and Italy are reviewed. Attention is given both to those narratives which reflect the life of a particular country and to those which are international and express more generally the spirit of medieval Europe.

# Eng. 535. Eighteenth Century English Literature

2 s.h.

Major essayists, poets, dramatists, novelists, and letter writers are read and evaluated in terms of the thought, life, and literary movements of their own time and in terms of their significance for the present generation. Authors studied include Addison, Steele, Defoe, Swift, Goldsmith, Sheridan, Gray, Johnson, Boswell, Cowper, Richardson, Fielding, Sterne, Smollett, and Gibbon.

#### Eng. 536. Philosophy in Great Literature

2 s.h.

The study of a few masters of literature, such as Dostoievski, Tolstoy, Mann, Proust, aims at giving the student a deeper insight into the life-views and world-views which have shaped the consciousness of modern Western man.

#### Eng. 537. American Drama in American Democracy

2 ch

Plays produced on the American stage from Colonial to contemporary times are read and studied to illustrate the development of democratic concepts.

# Eng. 538. American Literature of Social Problems

2 s.h.

American literature reflecting social problems from 1800 to 1914 is surveyed to discover the attitudes of various authors toward these problems. Such authors as Cooper, Lowell, Thoreau, Whitman, Howells, Bellamy, Garland, and Glasgow are studied from this point of view.

# Eng. 539. Theater and Society

2 s.h.

Dramatic expression from ancient Greece to the present is studied to observe and appreciate social, political, and ethical trends reflected in the drama. Social trends in contemporary drama receive special attention.

#### Eng. 540. T. S. Eliot

2 s.h.

All of the works of Eliot—poems, plays, and critical essays—will be read. A survey will be made of his influences on his immediate circle, on the poets and critics of the Nashville Group, and on the New Criticism. The reasons for his dominating position in the world of English and American letters during forty-odd years will be assessed.

#### Eng. 541. The New Grammar

2 s.h.

New grammatical theories are introduced. The most essential details of structural and generative grammar are contrasted with traditional syntax. The relationship between a knowledge of grammar and the ability to write is evaluated in terms of teaching methods.

#### Eng. 543. Contemporary American Literature

2 s.h.

Major authors and literary movements in contemporary America are studied. Writers of prose, poetry, and drama are included.

#### Eng. 544A, 544B, 544C. Shakespeare

s.h. each

Part A deals with the tragedies. Shakespeare's development as a writer of tragedy, his concept of the tragic, and the diversity of characters who embody this concept are studied in the light of critical traditions and the history of Shakespearean stage production.

Part B deals with the comedies. Shakespeare's development as a writer of comedy, his masterful understanding of the large function of comedy, and the variety of situations and characters exhibiting this function are critically studied.

Part C deals with the English chronicle plays and with Roman plays. Shakespeare's use of history in these plays is considered first as history and then as history presented dramatically and poetically.

# Eng. 546A, 546B, 546C, 546D. Giants in American Literature: Hawthorne, Henry James, O'Neill, Faulkner 2 s.h. each

A careful comprehensive study will be made of one of these giants of American Literature. Emphasis will be placed, not only on the significance of his individual works, but also on his influence on American thought and literary patterns. Each of these authors will be considered for an entire course.

#### Eng. 548. Fiction as an Image of World History

2 s.h.

A sequence of historical and cultural novels is presented to give insight into the epochs involved. Great historical novels pertaining to Hebrew, Egyptian, Greek, Roman, Medieval, Renaissance, and modern times are discussed.

# Eng. 603. English Research Writing

2 s.h.

This seminar course is designed primarily to provide an opportunity for graduate students in English to investigate and apply the techniques of research in the English field. Prerequisite: Educ. 503.

# SENIOR-GRADUATE COURSES

# Eng. 408. Advanced Creative Writing

3 s.h.

The nature of the creative process in the arts in general is studied as it relates to creative writing. Through work on an extensive creative writing project, the student's creative writing ability is further developed. Methods of teaching creative writing are studied. Prerequisite: Eng. 104, or equivalent.

# Eng. 409. Playwriting

2 s.h.

Lectures and discussions focus on the nature of dramatic dialogue, on problems of form and structure, and, most importantly, on the part which a script plays in a total dramatic production. There is opportunity for exercises in writing dramatic scripts, from the brief skit to the one-act play.

#### Eng. 419. Theories and Teaching of Grammar

3 s.h.

The new linguistics approaches to the study and teaching of English grammar are introduced and a survey presented of the extent to which the "new" grammar is being programmed for grade and secondary schools. The rules of grammar and writing proficiency are related so that the future teacher may be enabled to secure better response from his students.

#### Eng. 422. Survey of British Literature to 1798

3 s.h.

All forms of British Literature, except drama and fiction, from the beginnings to the triumph of romanticism in 1798, are systematically surveyed. Chronology, development, and the transmission of influences and traditions through the centuries are studied.

#### Eng. 423. Survey of British Literature

3 s.h.

British literature from 1798 to the present is surveyed. Prerequisite: Eng. 422.

#### Eng. 431. The Age of Chaucer

3 s.h.

The student is introduced to medieval literature in England. Portions of Chaucer, Gower, Wycliffe, and Langland are read in Middle English. Other writings and their cultural setting are treated in lectures, discussions, and term papers.

#### Eng. 433. Shaw, Galsworthy, and Wells

3 s.h.

These eminent writers of the first half of the Twentieth Century will be read and discussed to understand their attitudes toward society and to examine the contrasts in their ideas and styles.

#### Eng. 441. Modern Poetry: French Symbolists to T. S. Eliot

2 s.h.

Representative Symbolist, Georgian, and Imagist poets are studied in depth in order to examine the theories and principles upon which Modern Poetry is based.

#### Eng. 442. Contemporary Poetry: W. H. Auden to the Present

2 s.h.

The distinctive poetry movements that have occured since the Imagists are examined through the study in depth of representative poets. Critical appreciation is developed through comparison of diverse styles, themes, and poetic theories. Recommended prerequisite: Modern Poetry 441.

#### Eng. 453. Theme, Form, and Idea in the Drama

2 s.h.

The analytical perspective needed in all evaluations of drama, new or old, is given. To this end, theme, form, and idea in dramatic history are investigated. Selected plays from Aeschylus to the present are arranged for the study of these components.

#### Eng. 454. The Film and Society

3 s.h.

The film is studied and evaluated as an art form, an educational device, a social force, and an entertainment medium. The history of motion pictures, film techniques, and the scenario as a literary type are examined. Numerous films are shown, analyzed, and discussed.

#### Eng. 461. Biography: Its Form and Function

3 s.h.

Selected biographical writings, including autobiography, diary, and memoirs, from medieval England to contemporary American Pulitzer Prize biographies, are examined. Study emphasizes both changing concepts of the form and also revelations of the nature, character, and varied destinies of human personality.

#### Eng. 462. Autobiography

3 s.h.

The world's major autobiographical writing as it appears in the memoirs, diaries, and journals of some of the greatest political and literary figures will be evaluated. Beginning with autobiographical expression in ancient times, the reading proceeds chronologically. A deeper insight into the life and times of these figures in terms of their significance for contemporary life is emphasized.

#### GENERAL EDUCATION COURSES IN ENGLISH

The following course may be chosen by matriculated students (other than English majors) to meet the requirements in General Education outside their specific area of specialization:

English: 500, 507, 509, 518, 520A, 520B, 521, 522, 524, 527, 528, 535, 536, 537, 538, 539, 543, 548, 408, 409, 441, 442, 454, 461, 462 or any other course with permission of the Department of English.

# DEPARTMENT OF FINE ARTS

Graduate Advisor: DR. FOSTER WYGANT

The graduate program in Fine Arts leading to the Master of Arts degree is intended:

- a. to offer to Fine Arts teachers in the New Jersey public schools an opportunity to gain further professional preparation for the improvement of their teaching skills.
- b. to provide an opportunity for students to extend, intensify, and enrich their undergraduate program of general education in order that they may become better informed and more responsible citizens of a changing society.
- c. to assist students to acquire a more advanced and comprehensive grasp of the major problems, issues, and techniques of professional education.
- d. to provide an opportunity for students to extend their knowledge and experience in their field of specialization.
- e. to encourage the spirit of scientific inquiry and creative, original, and independent thought by providing training and experience in educational research.
- f. to provide experience designed to develop in students desirable personal and social qualities of democratic citizenship.
- g. to encourage the teacher to gain the requisite status for professional advancement.

# Admission Requirements and Screening Procedures:

- a. The requirements established for all graduate studies and for matriculation at the College will be followed in respect to this program.
- Matriculation normally requires prior completion of the basic courses in art education needed for New Jersey certification to teach art in the secondary schools (grades 7-12) or in the elementary and secondary schools (grades K-12).
- c. Special provision is made in this program to matriculate certified elementary teachers who have an interest and ability in art, and who wish to improve their art background. This is a very rewarding program for some elementary teachers.

Applicants are cautioned, however, that this M.A. program will not automatically lead to certification in art, and that certain prerequisites in art must be fulfilled.

# REQUIREMENTS FOR THE M.A. DEGREE IN FINE ARTS

I. General Education (see Master's Degree Program Pattern)
 6-12 s.h.
 II. Basic Professional Education (see Master's Degree Program Pattern)
 6-9 s.h.
 III. Specialization Courses
 11-20 s.h.
 F.A. 603. Seminar in Art Education

Required of all candidates (except students who elect Grad. 600 Master's Thesis). Prerequisite: Educ. 503.

The following	courses	will	be	elected	by	students	subject	to	approval	of	the
Graduate Advisor:									9-	18	s.h.

aduate Advisor.
1. Art Education
F.A. 501. Readings in Art Education
F.A. 502. Curriculum Construction in Art Education
F.A. 603. Seminar in Art Education
1.71, 003, Schinar in 711 Education
2. Art History and Philosophy
F.A. 400. Philosophy of Art
F.A. 402. Modern Philosophies of Art
F.A. 411. History of Oriental Art
F.A. 412. Primitive Art
F.A. 413. History of American Art
F.A. 453. Modern Art
F.A. 492A, 492B. Selected Problems in Art History 2 s.h. each
F.A. 620. Field Course in Art
2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3. Fine Arts
F.A. 440. Home Design and Community Planning
F.A. 445A, 445B, 445C, 445D. Life Drawing2 s.h. each
F.A. 451A, 451B. Painting: The Environment 2 s.h. each
F.A. 452A, 452B. Multi-Media
F.A. 460A, 460B, 460C, 460D. A Contemporary Art Form (Photog-
raphy) 2 s.h. each
F.A. 511A, 511B, 511C, 511D. Painting
F.A. 521A, 521B, 521C, 521D. Sculpture
F.A. 525A, 525B. Metalwork and Jewelry 2 s.h. each
F.A. 531A, 531B, 531C, 531D. Ceramics
F.A. 541A, 541B. Weaving
F.A. 543A, 543B. Decoration of Fabrics
F.A. 550. Silk Screen Printing
F.A. 551. Intaglio Printing
F.A. 552. Woodcut Printing
F.A. 553. Lithography
F.A. 556. Lettering
F.A. 557. Graphic Design
4. Individual Study and Thesis
Grad. 600. Master's Thesis
F.A. 611, 612. Individual Study
Minimum: 32 s.h.

#### **GRADUATE COURSES**

#### Fine Arts 503. Readings in Art Education

2 ch

This course is a study of the literature of the foundations of art education. Readings will be selected from philosophy, the social and behavioral sciences, and the history of art education. The implications of the developments in science and technology will be studied.

#### Fine Arts 502. Curriculum Construction in Art Education 2 s.l

This course is planned for students with interest in curriculum construction or revision and includes both the elementary and secondary programs. A study of curricular materials in use in New Jersey and selected materials in use throughout the country will be made. Evaluation of these materials will be made in terms of principles of curriculum construction.

#### Fine Arts 503. Foundations of Art

2 s.h.

This is a survey course designed for public school administrators, guidance personnel, and teachers of disciplines other than art. It includes a study of the philosophy of art, the historical purposes of art, forms of art and their valuation, and implementation of the objectives of art in education. Humanities elective for non-art majors.

# Fine Arts 511A, 511B, 511C, 511D. Painting

2 s.h. each

Studio in painting is designed to further the creative impression and technical knowledge of the student in various painting media. Emphasis will be upon personal and professional development through studio work, trips, and the study of the work of contemporary artists.

# Fine Arts 521A, 521B, 521C, 521D. Sculpture

2 s.h. each

In these courses the student is expected to explore independently one or two materials and techniques and to begin to find his own directions as a sculptor.

#### Fine Arts 525A, 525B. Metalwork and Jewelry

2 s.h. each

Experiences in this sequence involve the designing of jewelry and small sculpture in varied metals and employing the techniques of flat sheet metal and casting.

#### Fine Arts 531A, 531B, 531C, 531D. Ceramics

2 s.h. each

Pottery and ceramic sculpture are included as forms of ceramic art. Instruction in basic aspects of forming, decorating, glazing and firing will be covered. Beyond this the work will be determined on an individual basis.

# Fine Arts 541A, 541B. Weaving

2 s.h. each

Primary emphasis in this experience is on designing with simple and four harness table and floor looms in a variety of techniques and materials.

# Fine Arts 543A, 543B. Decoration of Fabrics

2 s.h. each

In this area major emphasis is on designing of the fabric through block printing, silk screen printing, stitchery, hooking, applique, and dyeing techniques.

#### Fine Arts 550. Silk Screen Printing

2 s.h.

This course affords an opportunity to study and practice the graphic art techniques of silk screen from the creation of the master design through the construction of necessary printing facilities and printing. Experiences will include the use of tusche, glue, stencil lacquer, and photographic techniques.

#### Fine Arts 551. Intaglio Printing

2 s.h.

This course is designed to enable the graduate student to acquire additional competency and depth of experience in etching, dry point, aquatint, and soft ground. Stress is on critical evaluation of design integrated with printing techniques.

#### Fine Arts 552. Woodcut Printing

2 s.h.

This course explores the fine art of the woodcut, and its relation to painting in color, size, and richness. The cutting of various woods and veneers is fully demonstrated. Different approaches of printing and inventiveness in using other materials in relation to wood are fully explored. The course includes lectures on prints of the past and field trips to important print exhibitions.

#### Fine Arts 553. Lithography

2 s.h.

This course is designed to provide opportunity for the student to acquire competency in the art of lithography. All steps from design and execution of master drawing to the finished print are covered. Studio experiences provide the student with first hand knowledge of tools, materials, and techniques of the lithographic process. Adaptation of the lithographic phase of print-making to classroom use is also studied.

# Fine Arts 556. Lettering

2 s.h.

This course provides a study of styles and techniques of lettering applied in such forms as manuscripts, signs, posters, display, and advertising layout. A brief introduction to typography is offered in the course.

# Fine Arts 557. Graphic Design

2 s.h.

This course is concerned with the techniques and principles of design of printed matter and displays. Design projects involve elements of layout, illustration, typography, printing process, and preparation of copy for the printer.

#### Graduate 600. Master's Thesis

4 s.h.

#### Fine Arts 603. Seminar in Art

2 s.h.

This course is designed primarily to afford the graduate student an opportunity to make an extensive study in the field of art. Prerequisite: Educ. 503.

The seminar extends through Fall and Spring semesters. Within this period, each student will carry out either A or B:

- A. WRITTEN PROJECT. The student will enroll, with the approval of the graduate advisor, in the course F.A. 603, Graduate Seminar in Art. Approval should be secured in the spring semester or summer session preceding fall registration into F.A. 603.
- B. CREATIVE PROJECT. Pre-requisite: at least one course in the chosen studio area, during which course the student must secure: 1. approval of the instructor as to competence in the medium; 2. agreement by one particular faculty member to serve as personal advisor throughout the creative project; and 3, approval of the departmental graduate advisor. Upon such approval, the student will enroll for the subsequent fall semester in course F.A. 603.

# Fine Arts 611, 612. Individual Study

2 s.h. each

Under this course designation, advanced students may extend their experience beyond the regular course offering in a chosen field or medium, to a maximum of 12 hours in the particular medium. Direction, conduct, and evaluation of the work are developed in consultation with the instructor. As a basis for admission and planning, each student will present a representative selection of his prior work in the chosen medium.

#### Fine Arts 620. Field Course in Art

2-6 s.h.

Travel courses to art sources in the United States and foreign countries will be accepted for graduate credit not to exceed 6 points. A general catalog description of these courses follows. Content and requirements will be set up as the courses evolve.

This course provides the opportunity to have a first-hand contact with the historic art forms of the places visited and to see contemporary artists and craftsmen in the process of creating art forms. Each student will select an area of study in which the places visited have rich art resources. As preparation for the course the student will outline his chosen study problem, read background material, and list sources he expects to utilize.

#### SENIOR-GRADUATE COURSES

#### Fine Arts 400. Philosophy of Art

2 s.h.

This course is designed to give the student a knowledge of the various theories of art and the nature of the art experience. Readings include the works of major philosophic writers, artists, and psychologists. Through discussion each student is encouraged to develop a personal philosophy of art education. For fine arts majors or by instructor's permission.

#### Fine Arts 402. Modern Philosophies of Art

2 s.h.

The work of the major writers in art in the Nineteenth and Twentieth Centuries is examined. Exploration is made in the nature of the creative experience, the function of art in the life of the individual and of society, the nature of the creative process, the rise of new materials, and institutions and sentiments affecting current thinking in the field. Discussions are based on readings of philosophers, poets, social scientists, psychologists, and artists. Elective for fine arts majors and a humanities elective for non-art majors.

# Fine Arts 411A, 411B. History of Oriental Art

2 s.h. each

Just as the art of the Italian Renaissance developed out of humanism and its man-centered philosophy, so the art of the East grew out of equally strong, although totally different (and even diametrically opposed) influences. This course examines the factors which shaped Oriental society and the rich art inventory that evolved in China, Korea, Japan, India, South East Asia, and the neighboring Islamic world. Slides, illustrations, and museum objects are studied not only as they mirror historic developments but primarily as objects of artistic excellence in themselves. An elective for Fine Arts majors and/or humanities elective.

#### Fine Arts 412. Primitive Art

2 s.h.

This course surveys the art of those people we generally call "primitive"-African and Oceanic-and of the various pepole of North, Central, and South America before the arrival of Columbus. Far from being the crude expressions of illiterate savages, their art appeals to modern man for the sophisticated, immediate, and forceful impact it makes. The major styles and sub-styles of the regions listed above are identified, through slides, illustrations, and examples exhibited in museums and galleries, and the works are discussed from the standpoint of their aesthetic contributions. An elective for Fine Arts majors and/or humanities elective.

# Fine Arts 413. History of American Art

2 s.h.

An examination of art in the United States from the Colonial period to the present, with special consideration given to the question of the development of an American "style" in the light of its relationship to, and dependence upon, European art. The landscape, portrait and genre traditions in the painting of the United States are studied, as well as developments of the Twentieth Century. Folk, classical, and modern expressions in sculpture will be surveyed as well as architecture from colonial dwellings to works of this century. An elective for Fine Arts majors and/or humanities elective.

#### Fine Arts 415. Designing in Native Materials

2 s.h.

In this course the student gains an appreciation and understanding of art expression growing out of the immediate environment as he works creatively with native materials. A new respect for the potentials of raw earth products is discovered through art experiences in keeping with good conservation practices. Flower and plant arrangements for room and table decorations are studied. Digging for clay, hunting for wood, seeds, grasses, and experimenting with dyes becomes an exciting adventure. (Offered at N.J. State School of Conservation. See this section of catalog.)

#### Fine Arts 440. Home Design and Community Planning

2 s.h.

The design of the home and the community for the full utilization of the knowledge and the resources of industry, engineering, science and art is the content of this course. Work of leading architects and city planners is explored as it fits into the solution of the problems of interest to the student and as a reflection of our contemporary cultural patterns. Trips to sources for home furnishings, model homes, well-planned communities are included in the course activities.

# Fine Arts 445A, 445B, 445C, 445D. Life Drawing

2 s.h. each

This is a series of courses in the study of the structure and proportions of the human form with emphasis on expressiveness of drawing.

# Fine Arts 451A, 451B. Painting: The Environment

2 s.h. each

This course offers experiences in an area of painting whose content depends essentially upon a personal vision of the outer world. The interpretation of landscape as a unique source of pictorial ideas will be of first importance and the student will be encouraged to acquire concurrently some understanding of landscape painting in art history. To this end study of styles achieved by master landscapists will be carried out with particular reference to their relevance in our time. A variety of painting media will be used according to individual desire. An elective for Fine Arts majors only.

#### Fine Arts 452A, 452B. Multi-Media

2 s.h. each

This course will present an opportunity to bring together previous fine arts experience in painting, sculpture, and various aspects of theater arts.

The projects will be architectural and environmental in nature and will serve to introduce the student to both historical and contemporary ideas of "total-art." An elective for Fine Arts majors only.

#### Fine Arts 453. Modern Art

2 s.h.

This course is designed to survey through the use of visual materials such as slides, art films, and reproductions, and through discussion, the major influences and trends in the development of painting, sculpture, and architecture of this century. An elective for Fine Arts majors only.

# Fine Arts 460A, 460B, 460C, 460D. Photography: A Contemporary Art Form

This course emphasizes the role of the photographer as artist. Knowledge and skills of the craft of photography are developed within the context of the significant expression of ideas. This advanced course assumes knowledge of fundamental techniques.

#### Fine Arts 462. Foundations of Painting

2 s.h.

This elective gives the non-art major an opportunity to explore the art form painting, in greater depth, following the Introduction to the Visual Arts, the required general education course. The various schools of modern and contemporary painting with reference to their precursors will be studied through readings, trips, and studio experiences. Humanities elective for non-art majors.

#### Fine Arts 467. Foundations of Home Design

2 s.h.

The design of the home and the community for the utilization of resources of industry, engineering, science, and art is the content of this course. Problems arising from current psychological, sociological, and economic conditions will be studied.

Modern and contemporary architecture and modern industrial designers will be studied to learn their contributions to modern living. This is a humanities elective designed to enlarge the student's experiences in this area beyond the required course, Introduction to the Visual Arts. Humanities elective for non-art majors.

#### Fine Arts 468. Foundations of Photography

2 s.h.

This course provides for the creative development of the individual in photography, through personal experiences, trips, films, discussions, lectures, criticisms, and demonstrations. Areas for exploration include documentary realism, romanticism, action photography, portraiture, and nature photography. Essentials of the photographic process including developing, enlarging, and exhibiting are covered. Humanities elective for non-art majors.

#### Fine Arts 469. Foundations of Theater Arts

2 s.h.

The purpose of this course is to develop an increased interest and appreciation of the theater arts. Study in the allied areas of opera, musical comedy, and the dance, as well as the communication arts of the cinema and television, is made through trips, reading, and interviews. Special emphasis is given to the growing importance of the community theater. Construction of models is used to increase appreciation of contemporary stage and set designs. Outstanding designers are studied. Lighting demonstrations are arranged with cooperation of the Speech Department. Participation in campus theater experiences is encouraged. Humanities elective for non-art majors.

#### Fine Arts 470. Foundations of Textiles

2 s.h.

The art of textile is studied historically from primitive forms to contemporary development in methods and materials. Studies will be made of the contributions of the Feruvians and American Indians, as well as those of the Near and Far Eastern, Medieval, and Modern cultures. Studio experiences will be used to demonstrate these contributions in design and methods. Humanities elective for non-art majors.

# Fine Arts 490. Art of the Nineteenth Century

2 s.h.

This course explores the major art movements of the Nineteenth Century in terms of the rapid changes of social, political, and artistic personalities. The rise of Classicism, Romanticism, and Realism; the salon at mid-century; the Impressionists and post-Impressionists are discussed as well. The work of this period is studied through illustrated lectures, museum trips, readings, and discussion. Humanities elective for non-art majors.

#### Fine Arts 491. Art of the Twentieth Century

2 s.h.

This is a course designed to survey through the use of visual materials such as slides, art films, and reproductions, and through discussion and studio participation, the major influences and trends in the development of painting, sculpture, and architecture of the Twentieth Century. Humanities elective for non-art majors.

#### Fine Arts 492A, 492B. Selected Problems in Art History

2 s.h.

This is a seminar course dealing with selected art problems of historic, social, and philosophical nature. Some of the following topics are chosen for a detailed examination: the human figure in the history of art, the rise of landscape painting, Impressionism in the East and West, historical views of art criticism, the self-portrait, Romanticism and Realism, art and society, on Modern Art, art and the sciences, and the rise of "Isms," Methods for dealing with selected topics include lectures, readings, reports, and discussion.

#### Fine Arts 493. Masterpieces of World Art

2 s.h.

Designed for non-art majors, this introductory course studies key works of art representing prehistoric cultures, the ancient world, the East, the Renaissance, and the modern period, in reference to their historical and cultural settings and the personality of the artist. The course employs illustrated lectures, museum and gallery trips, readings, and discussion. Humanities elective for non-art majors.

#### General Education Courses in Fine Arts

The following courses may be taken by matriculated students (other than Fine Arts majors) to meet the requirements in General Education outside their specific area of specialization:

Fine Arts: 402, 411A and 411B, 412, 413, 415, 462, 467, 468, 469, 470, 474, 490, 491, 493, 503.

# DEPARTMENT OF FOREIGN LANGUAGES

Graduate Advisor: PROFESSOR LOUIS M. ROEDERER

It is expected that all candidates for the Master of Arts Degree will take French 505 or Spanish 505 and at least one of the two listed foundation courses, unless similar courses were already taken at the undergraduate level.

A candidate for the Master of Arts Degree may elect to write a thesis in lieu of four of the thirty-two semester hours of credit necessary for the degree. Plans for the thesis should be approved by the Department Chairman no later than one year prior to the anticipated date of graduation, and the work must be completed no later than four months before such anticipated date. It will be the responsibility of the student to observe these time limits.

General standards for matriculation will be as set forth in the College Graduate Bulletin. Individuals who do not wish to work toward the Master's Degree may enroll in the department with the approval of the Department Chairman.

Study abroad programs, previously required for admission at the Graduate School for French and Spanish majors, are now part of the elective courses offered by the Department either during the summer or on a yearly basis. Outlines of these programs will be found at the end of the list of elective courses. Further details may be obtained from the Graduate Advisor for the Department of Foreign Languages.

All courses are given in the language of the literature studied, except Language 408, Language 603 and other courses as may be necessary.

# REQUIREMENTS FOR THE M.A. DEGREE IN FRENCH

-	The state of the s		
I.	General Education (see Master's Degree Program Patterns)	6-12	s.h.
п.	Basic Professional Education (see Master's Degree Program Patterns)	6-9	s.h.
III.	Specialization 1	1-20	s.h.
	Required Course		
	French 505. History of the French Language	2	s.h.
	Foundation Courses (minimum 2 s.h.)		
	Language 408. Introduction to Language Laboratory	2	s.h.
	French 506. Advanced French Phonetics	2	s.h.
	Elective Courses		

These courses will be elected, with Departmental approval, and will be offered on a rotating schedule so as to enable students preparing for their Master's degree to take at least one course on each century within a year, summer session included. Students specializing in French may elect some courses from other Foreign Language offerings.

Minimum: 32 s.h.

IV. Comprehensive Examination

# REQUIREMENTS FOR THE M.A. DEGREE IN SPANISH

- I. General Education (see Master's Degree Program Patterns) 6-12 s.h.
- II. Basic Professional Education (see Master's Degree Program Patterns) 6-9 s.h.

Elective Courses

# III. Specialization Required Course Spanish 505. History of the Spanish Language 2 s.h. Foundation Courses (minimum 2 s.h.) Language 408. Introduction to Language Laboratory 2 s.h. Spanish 506. Advanced Spanish Phonetics 2 s.h.

These courses will be elected, with Departmental approval, and will be offered on a rotating basis so as to enable students preparing for their Master's Degree to take courses in both areas of Spanish and Spanish-American literature. Students specializing in Spanish may elect some courses from other Foreign Languages offerings.

Minimum: 32 s.h.

IV. Comprehensive Examination

#### GRADUATE COURSES IN FRENCH

NOTE: Previous course numbers are enclosed in parentheses. Students are not permitted to enroll in courses taken previously under other titles and/or course numbers.

# French 505. (515) History of the French Language 2 s.h.

The course is designed to acquaint the student on the graduate level with the developmental processes in language with special reference to French. It examines also the relationship between language change and cultural change. The French language is studied from its origins to the present time with units in Vulgar Latin, Old French, Middle French, Renaissance French, and Modern French. At each step, development of phonology, morphology, and vocabulary are studied along with social backgrounds.

#### French 506. Advanced French Phonetics

2 s.h.

This course is designed to acquaint students on the graduate level with the principles of phonetics and their practical application in acquiring and teaching a correct French pronunciation. Some previous knowledge of phonetics is desirable.

# French 510. Supervised Individual Study

1 or 2 s.h.

This course is designed to provide students with an opportunity to work in depth on a subject of special interest, or to make up part of a course in which the student has failed or shown specific weaknesses.

#### French 511. (505) Medieval French Literature

2 s.h.

This course is designed as a survey of the origins and developments of the principal genres during the Middle Ages in France: chanson de geste, literature courtoise, fabliaux, chroniques, theater and poetry.

#### French 516. (506) French Literature of the Renaissance

2 s.h.

This course is designed to give the student a comprehensive view of the literature and ideas of Sixteenth Century France, including the study of the following authors: Montaigne, Rabelais, Clément Marot, Ronsard.

#### French 526. Corneille and Racine

2 s.h.

This course is designed to acquaint students on a graduate level with the evolution of the classical theater in the Seventeenth Century. The dramatic art, psychology, and symbolism of Corneille and Racine will be analyzed through extensive reading and intensive discussion of their major plays. Parallels will be drawn with the Greek tragedy.

#### French 527. Pascal and Descartes

2 s.h.

This course is designed to acquaint the student with the writings, ideas, and scientific achievements of Pascal and Descartes. Special emphasis will be put on Pascal's Pensées and Provincial Letters.

# French 533. The Age of Enlightenment

2 s.h.

This course is designed to acquaint the student with the philosophical, educational, and social concepts of the century through intensive study of Voltaire, Montesquieu, Rousseau, and Diderot.

#### French 534. Le Sage, Marivaux, Beaumarchais

2 s.h.

This course will require extensive readings and analysis of the most important plays of the time, including Turcaret, Le Jeu de l'Amour et du Hasard, Le Mariage de Figaro and similar works.

#### French 538. The French Novel of the Nineteenth Century

2 s.h.

This course aims at offering the graduate student an insight into the major works and literary criticism of masters of French fiction.

#### French 539. Survey of Nineteenth Century French Poetry

s.h.

This course is designed to offer the graduate student a survey of the development of French poetry from Romanticism through the Parnassian School to Symbolism including poems of Lamartine, Hugo, Vigny, Musset, Laconte de Lisle, Heredia, Baudelaire, Verlaine, Rimbaud and Mallarmé.

#### French 542, (407) The Contemporary Theater

2 s.h.

The purpose of this course is to acquaint students on the graduate level with the history and development of the French theater since 1890. Major currents and trends in contemporary drama will be analyzed. Authors studied include Paul Claudel, Henri de Montherlant, Jean Giraudoux, Jean-Paul Sartre, Albert Camus and other dramatists representative of each major trend of the modern French theater.

#### French 543. The Contemporary Poets

2 s.h.

This course considers the development of French poetry from Symbolism to Surrealism and will include works from such poets as Apollinaire, Saint-John Perse, Supervielle, Eluart and Aragon. The aim of this course is to convey to the students a deeper appreciation of French poetry through a literary and historical approach and the study of the fundamentals: versification, the technical side of poetry and imagery, the language of poetry.

#### French 544. (406) The Contemporary Novel

2 s.h.

This course is designed to acquaint students on the graduate level with the history and development of the French novel from Proust to the present day. Major currents and trends are analyzed; works of modern novelists, including Proust, Gide, Malraux, Sartre, and Camus are read and discussed.

#### SENIOR-GRADUATE COURSES IN FRENCH

#### French 410. Advanced Composition

2 s.h.

This course is designed to improve the student's mastery of the language through written and oral exercises accompanied by a review of advanced grammar.

#### French 411. (502) Study Abroad

6-10 s.h.

This course is designed to give teachers and students an opportunity to gain first-hand knowledge of the historical, social, economic, and cultural life of France and Europe. This aim will be achieved through visits to various representative sites, tours, and lectures.

#### French 421. French Language Laboratory Material

2 s.h.

This course is designed to acquaint students on the graduate level with the effective use of the laboratory in language teaching. Problems relating to materials, methods, new techniques, facilities, and scheduling are discussed.

#### GRADUATE COURSES IN SPANISH

#### Spanish 505. History of the Spanish Language

2 s.h.

A survey of the development of the Spanish language from its origin to the present day in Spain and Spanish America. The course traces the phonological, structural and lexical evolution of Spanish from its Latin ancestor, by following the process of its transformation, as well as the various stages through which the language has passed from the time of its first documentary appearance.

# Spanish 506. Advanced Spanish Phonetics

2 s.h.

The course is especially designed for Spanish teachers who wish to acquire a correct pronunciation and enunciation according to the best patterns of speech of the Spanish language as it is spoken by the educated vernacular speakers of Spain and Spanish America.

#### Spanish 510. Supervised Individual Study

1 or 2 s.h

This course is designed to provide students with an opportunity to work in depth on a subject of special interest, or to cover part of a course in which the student has failed or shown a special weakness.

# Spanish Area

# Spanish 516. Survey of Medieval Spanish Literature

2 s.h.

A review of outstanding works and themes from Latin, Arabic, and Hebrew roots—expressing the main features of Spanish literature, culture, and thought from the Eleventh Century "Jarchas" and "Cantarcillos de amigo" through the *Poema del Cid* and culminating in *La Celestina* and the advent of the Golden Age.

# Spanish 521. The Novel of the Golden Age

2 s.h.

A survey of its creation and development from earlier forms through a reading of representative works of the picaresque genre—from Lazarillo de Tormes to El Buscón—as well as the Novelas Ejemplares of Cervantes, emphasizing their ethical and artistic values and influence in the main stream of European literature.

#### Spanish 522. The Theater and Poetry of the Golden Age

2 s.h.

Poetic currents of the "Siglo de Oro" beginning with the Renaissance period, from the popular lyrical poetry and the Romancero through the adoption of the Italian forms and metres and the mystic poets to the Baroque period. In the drama, representative plays of Lope de Vega, Tirso de Molina, Calderón de la Barca, and Ruiz de Alarcón are read and analyzed against the historical background of the Sixteenth and Seventeenth Centuries.

#### Spanish 524. Seminar in Cervantes

2 s.h.

The course is designed to study Cervantes as a figure of synthesis in the art of the novel in Spain. El Quijote, the Novelas Ejemplares and Persiles y Segismunda will be analyzed. Oral and written reports will be prepared by the student.

#### Spanish 526. Spain in the Nineteenth Century

2 s.h.

This course will aim at providing an understanding of the historical, cultural and political developments of Nineteenth Century Spain. Readings and discussions of the most representative authors of the romantic, neo-classicist, and realistic trends.

#### Spanish 532. (430A) The Short Story in Spain

2 s.h.

This course covers the study of the origin and development of the short story in Spain from the Middle Ages to the present time. Different types of short stories are studied in order to explain historically and sociologically the appearance of themes written in Spanish through the centuries. The aim of the course is to give the student additional understanding of the Spanish people, their culture and history, as expressed by the short story from the Thirteenth Century to the present.

# Spanish-American Area

#### Spanish 540. Sarmiento and His Times

2 s.h.

The purpose of this course is the study of the culture and civilization of the Rio de la Plata region and Chile from the period of Independence to the beginning of "Modernismo" through the most important figure of this period. Relations with the United States will be discussed.

#### Spanish 541. (506) Spanish-American Novel

2 s.h.

The purpose of this course is to acquaint the student, through extensive reading and intensive discussion, with representative Spanish-American novels from the Sixteenth Century through the Twentieth Century. These works include narratives depicting life in early colonial times; the novel of adventure; the picaresque tale; the romantic novel; the psychological novel; the novel of the land; the sociological novel; the artistic "modernista" novel; the political novel; the novel of the Mexican revolution; the social, the neorealistic, the impressionistic, the philosophical and the existentialist trends in the novel.

# Spanish 546. Seminar in Modernismo

2 s.h.

A critical re-evaluation of the "Modernnista" phase of Spanish-American poetry: 1882-1917. Special emphasis will be given to individual techniques and characteristic use of specific images, the reliance on Synesthesia, and the attempt to incorporate pictorial elements into poetry which welded these individuals into a genuine poetic movement. Each participant is expected to present a piece of original research at a designated time during the course-term.

# Spanish 548. Spanish-American Essay

2 s.h.

A careful reading of selected Spanish-American authors representing a cross section of all Spanish-speaking social classes and tendencies in order to evaluate their reactions through their written expressions. A comparison of the main essayists with their contemporaries in Spain and in the United States will show the tenor of political thought, inter-influences between the United States and Spanish-America, and the most important viewpoints of Spanish-American intellectuals.

#### Spanish 549. (430B) The Short Story in Spanish-America

2 s.h.

This course will cover the development of the Spanish-American short story from its origins in the Colonial Times. Representative authors will be included to show the evolution of the genre up to the present time.

# Spanish 551. (425) Contemporary Spanish-American Poetry

2 s.h.

This course considers the development of Spanish-American poetry from the anti-modernist reaction, and the four major feminine poets, as antecedent for the appreciation and evaluation of Neruda, Pellicer, Marechal, Borges, Gorostiza, Carrera Andrade, Florit, Villaurrutia and Octavio Paz. Readings from recently published books and poetry magazines of wide circulation in Spanish-America are included.

# SENIOR-GRADUATE COURSES IN SPANISH

#### Spanish 403. Projects in Spanish and Spanish-American Folklore

3 s.h.

The purpose of this course is to acquaint the student with the different folklore expressions of the Spanish Peninsula, as well as of the Spanish-American countries, including its music, dancing, and traditions and their application to the classroom. To be offered as a required course to majors and also as an elective to other students and teachers from the outside who satisfy the requirements of the department.

#### Spanish 410. Advanced Composition

2 s.h.

This course is designed to improve the student's mastery of the language through written and oral exercises accompanied by a review of advanced grammar.

#### Spanish 411. (502) Study Abroad

6-10 s.h.

This course is designed to give teachers and students an opportunity to gain first-hand knowledge of the historical, social, economic, and cultural life of Spain and Europe. This aim will be achieved through visits to various representative sites, tours, and lectures.

#### GRADUATE COURSES IN LANGUAGE

#### Language 603. Foreign Language Research Seminar

2 s.n.

This seminar is designed primarily to provide an opportunity for graduate students in foreign languages to investigate and apply the techniques of research in the foreign language field. Prerequisite: Educ. 503 and matriculation for M.A. degree in the Foreign Language Department.

# SENIOR-GRADUATE COURSES IN LANGUAGE

#### Language 406. (Lat. 406) Field Studies in Roman Civilization

o s.n.

The course is designed to acquaint students and teachers of Latin, history and languages with the Roman Conquest of Europe, specifically in Britain, France, Belgium, Switzerland, and Germany by studying and visiting Roman ruins and monuments in these countries, thus providing historical and archaeological background for the enrichment of their classes. Military invasions followed by colonization and the planting of Roman culture and civilization are an object of investigation, and remains "in situ" and in museums are viewed. Art and archaeology are reinforced by readings related to paralleling the site from the Latin authors: Caesar and Tacitus. Readings and a term paper due three months after the end of the tour

are under the supervision of the instructor. Lectures on the tours of the sites are given by historians, archaeologists, and military personnel, authorities on the area, secured from universities, archaeological societies, museums and cultural commissions.

# Language 408. Introduction to Language Laboratory 2 s.h.

This course is designed primarily to acquaint language teachers with techniques of language-laboratory utilization and with the preparation of materials for use in the laboratory. Attention is given to equipment—its selection, operation, utilization, and basic maintenance. The course is open to all teachers of foreign languages and to audio-visual specialists, and is taught in English.

#### Language 410A. Roman Civilization to Imperial Times

Rome's contribution to Western Civilization is studied through her architecture, art literature, science, and sculpture.

#### Language 410B. Roman Civilization During the Empire

This course is designed to acquaint students and teachers with the Roman Conquest of Europe, with emphasis placed upon the planting of Roman culture and civilization. The course will provide a background of history and archaelogy for all Latin programs. It is particularly recommended to those who will take Language 406.

#### Language 411. Greek Civilization

2 s.h.

2 s.h.

2 s.h.

Greece's contribution to Western Civilization is studied through her architecture, art, literature, and sculpture.

# Language 412. General Linguistics

2 s.h.

This course introduces the study of linguistics in general and of the Indo-European group of languages in particular. It focuses upon the origin, history, and development of languages. Through lectures and readings the student is acquainted with the latest research findings in both descriptive and historical linguistics.

#### Language 416. (Lat. 416) Seminar in Archaeology

This course is an introduction to the science of evaluating a culture through observation and analysis of sites and monuments. Attention to problems of dating, types of materials, function of buildings and decorations. Illustrated lectures, readings and discussions in addition to museum field trips will highlight the course. This course is especially recommended for teachers of Latin, Social Science, English, Science, Mathematics, Industrial Education and Technology and Fine Arts.

# **General Education Courses in French and Spanish**

The following courses may be chosen by matriculated students (other than French & Spanish majors) to meet the requirements in General Education outside their specific area of specialization:

Language 406, 410A, 410B, 411, 412, 416 or possibly other courses with permission of the Department of Foreign Languages.

6-12 s.h.

# DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION

Graduate Advisor: DR. JOHN REDD

The graduate program in Panzer School of Health and Physical Education is designed to increase the knowledge, understanding, and techniques of the inservice teacher. Emphasis will be given to the preparation of teachers for specialized work or master teaching in health and physical education. The techniques and skills of research are developed to enrich and improve the programs of the schools in New Jersey.

A major or minor in health and/or physical education from an accredited college or university constitutes a minimum requirement for admission. Other admissions requirements are discussed elsewhere in the Graduate Bulletin.

A candidate for the Master of Arts Degree in Health and/or Physical Education should consult the Graduate Advisor of the Panzer School of Health and Physical Education before matriculation. The student with a minor preparation in health or physical education will be requested to undertake designated prerequisites as a part of his program. The student with a major in the above fields may be requested to undertake additional work where deficiencies are apparent. The prerequisite requirements will be in addition to the minimum 32 semester-hour work program.

# REQUIREMENTS FOR THE MASTER'S DEGREE IN HEALTH OR PHYSICAL EDUCATION

I. General Education (see Master's Degree Program Pattern)

II. Basic	Professional	Education (see Master's Degree Program Pattern) 6-9 s.h.									
III. Specia	I. Specialization 11-20 s.h.										
Studer Education. selected from	nts may pur Each seque om either ar aximum of	sue a concentration in either Physical Education or Health ence will have certain required courses. Electives may be rea within the limits outlined under Elective Courses below 20 semester hours of required and elective courses under									
A. Re	quired Cour	rses—Physical Education Sequence 12 s.h.									
1.	Physical Education 603. Research Seminar in Physical     Education and Health										
2.	P.E. 575.	Foundations and Interpretation of Physical Education 2 s.h.									
3.		Curriculum Development in Physical Education; or Administration and Supervision of Physical Education 2 s.h.									
4.	P.E. 578.	Physical Education for Exceptional Children 2 s.h.									
5.	P.E. 579.	Advanced Tests and Measurements in Physical Education 2 s.h.									
6.		Curriculum Development in Health Education; or Seminar in Basic Issues in Health									

B. Required Courses—Health Education Sequence	2 s.h.
Education and Health	2 s.h.
(Required of all candidates except those students who enrol	l for
Grad. 600.)	
2. H.E. 525. History and Foundations of Health	2 s.h.
3. H.E. 526. Curriculum Development in Health Education	2 s.h.
4. H.E. 411. School Health Services; or	
H.E. 527. Healthful School Living	2 s.h.
5. H.E. 528. The Evaluation of Health	2 s.h.
6. H.E. 529. Seminar in Basic Issues in Health	2 s.h.
C. Electives 0-	8 s.h.

The selection of electives will be determined through advisement and will be based on the needs and interests of each individual.

Minimum: 32 s.h.

# IV. Comprehensive Examination

A comprehensive written examination is required of all candidates for the Master of Arts degree with the exception of those students who elect Graduate 600, Master's Thesis, in which the student earns four semester-hours credit.

#### **GRADUATE COURSES**

# **Health Education**

# H.E. 500. Health Aspects of Family Living

2 s.h.

This course deals with problems of growth and development, reproduction, heredity, and social and emotional aspects of sexual development. The role of the family in today's culture and problems of family relations are examined. Prerequisite: A basic course in Health Education.

#### H.E. 501. School Safety

2 s.h.

This course will deal with all aspects of safety relating to the well being of school personnel. Incidence of accidents and their cause, safety hazards, disaster control, and development of a school safety program will be considered.

# H.E. 508. Advanced Driver Safety

3 s.h.

This course continues the development of new and broader competencies in traffic safety, and the teaching of Driver Education, evaluation, and research. Prerequisite: Students must be certified Driver Education Teachers in the State of New Jersey and have had at least two years of experience as a Driver Education Teacher.

#### H.E. 525. History and Foundations of Health

2 s.h.

The history of the health movement is traced from 1000 B.C. to the present with special emphasis on certain periods that serve as landmarks in man's progress in health promotion. The unique role of the school as one agency in health promotion is considered in depth. The foundations for programs of health are studied in relation to scientific advancements and prevailing philosophies.

#### H.E. 526. Curriculum Development in Health Education

2 s.h.

The purpose of this course is to provide the student with opportunities to improve his skills and techniques in curriculum construction. The framework of the curriculum and criteria for selection of curricular experiences will be undertaken. A review and analysis of appropriate teaching methods, materials, and evaluation procedures will also be considered. Prerequisite: A methods course in Health Education.

#### H.E. 527. Healthful School Living

2 s.h.

School environment, organization of the school day, and the inter-personal relationships favorable to emotional, social and physical health are examined in this course. Standards for building construction and policies are studied as they relate to the school environment. The policies and procedures of schools that contribute to the emotional health of students are considered. Prerequisite: A basic course in Health Education.

#### H.E. 528. The Evaluation of Health

2 s.h.

The procedures useful in determining the effectiveness of the school health program and its several phases are considered. The purposes of evaluation, devices available, and administrative problems are discussed. The development and interpretation of evaluation devices are an important part of the course. Prerequisite: A methods course in Health Education.

#### H.E. 529. Seminar in Basic Issues in Health

2 s.h.

This course is designed to survey current trends in the organization, administration, and teaching methods of health education. The content of the course will be based on the developed objectives evolved by the students and teacher in light of their experiences. Prerequisite: A methods course in Health Education.

# **Physical Education**

#### P.E. 550. Survey of the Literature and Trends in Physical Education 2 s.h.

Students will be required to survey comprehensively books, periodicals, and other teaching materials in the field of physical education. They will also identify the outstanding authors and be familiar with their basic philosophies.

#### P.E. 551. Philosophy of Recreation in School and Community 2 s.h.

Presents a survey of the development of recreational philosophies and a study and evaluation of the modern philosophy in America. The organization of recreation in school and community, the importance of leadership, social and cultural implications, economic, governmental, and leisure time influences, and a study of current practices will be undertaken.

#### P.E. 552. Seminar in Current Problems in Men's Athletics

The organization and administration of intramural and inter-scholastic athletic programs will be considered in this course. Current practices related to crowd control, scheduling, promotion of the program, personnel, and other persistent problems identified by the students will be discussed. Trends in such areas as sports medicine, coaching, and officiating will also be considered.

# P.E. 553. The Development and Conduct of Extra Curricular Physical Education for Girls 2 s.l

Cultural, educational, economic and physical aspects in the selection of appropriate activities will be considered. Objectives in relation to desired outcomes will be established on the basis of group needs. Types of program organization and planning will be discussed, motivation, publicity and awards will be considered, programs in operation will be examined, and literature and research projects will be reviewed.

#### P.E. 554. Orientation in Sports Medicine

2 s.h.

New techniques, materials, modalities, and problems related to the prevention and care of athletic injuries will be covered. Appropriate current developments in the field of sports medicine will be discussed and studied along with new concepts and activities for conditioning for both the athlete and non-athlete. Prerequisite: Courses in the Prevention and Care of Athletic Injuries, Kinesiology, and Physiology of Exercise.

# P.E. 555. Scientific Analysis of Sport and Physical Education Skills 2 s.h.

This course is concerned with the principles of efficient movement as determined through research in allied fields. A study of mechanical and physiological principles will be undertaken to emphasize their importance in accelerating and improving motor learning as well as efficient body movement. Laboratory exercises, projects, and demonstrations will be the primary methods involved.

#### P.E. 575. Foundations and Interpretation of Physical Education 2 s.h.

A brief review of the history of physical education with emphasis on the development of physical education in the United States. Exploration of modern theories and philosophies of physical education in the United States and in foreign countries. A study of the scientific basis and foundations of physical activity and their relation to performance and fitness. Prerequisite: A course covering the history and principles of Physical Education.

#### P.E. 576. (450) Curriculum Development in Physical Education 2 s.h.

A study of the selection of appropriate physical education activities for elementary and high school programs based on principles of growth and development and psychological and

sociological needs. Current trends and practices will be investigated and evaluated. Opportunities will be made available for working in the student's particular area of interest, and to identify the relationship of physical education programs at all levels, and of physical education to other areas of instruction in the school curriculum. Prerequisite: Methods course in elementary and secondary physical education.

# P.E. 577. Administration and Supervision in Physical Education 2 s.h.

This course will concern itself with the role of the teacher and administrator in supervision in physical education. Techniques of interviews, visitation, conference and others will be studied in reference to their use with student teachers, beginning teachers, and experienced teachers. Supervision of both physical education and classroom teachers will be considered. Prerequisite: Three years of teaching experience.

#### P.E. 578. Physical Education for Exceptional Children

2 s.h.

An advanced course in the adaptation of physical education for the exceptional child. The aims, objectives, principles and underlying philosophy will be reviewed. The administration, organization and development of such programs in the schools will be discussed at length. Current trends will also be evaluated. Prerequisite: An undergraduate course in adapted or corrective physical education.

#### P.E. 579. Advanced Tests and Measurements in Physical Education 2 s.h.

A survey will be made of the development of new tests and techniques for determining levels of skill, status in growth and development, and for the various qualities which contribute to total physical fitness. Advanced techniques for processing data also will be considered. Prerequisite: A course in educational statistics.

#### P.E. 603. Research Seminar in Physical Education and Health 2 s.h.

The purpose of this course is to examine the principles upon which research is based in physical education and health and to familiarize students with important studies, programs, personnel and techniques employed in research in this area. Each student will be required to complete a research project which must be presented to the physical education faculty for approval. Prerequisite: Educ. 503.

#### SENIOR-GRADUATE COURSES

# **Health Education**

#### H.E. 408. Driver Education

3 s.h.

A basic course for the certification of Driver Education teachers. The course consists of a minimum of 40 hours of class recitation and/or discussion and 20 hours of practical experience. Prerequisite: Driver's license and three years of satisfactory driving experience.

NOTE: Students must be recommended by their high school principal and have an interview with the instructor before registration. This course should not be selected as a health education elective.

#### H.E. 411. School Health Services

2 ch

The student is familiarized with the health services in the school. The part the teacher plays in coordinating activities with the medical staff is emphasized. Prerequisite: A basic course in Health Education.

#### H.E. 412. Alcohol Education Workshop

2 s.h.

This is a workshop course offered with the cooperation of the State Department of Health and aimed at preparing teachers and other school personnel for more understanding service in this special area of education. The workshop covers the physiological, sociological, and psychological problems involved in the use of beverage alcohol and on the materials, sources, and techniques found to be most useful in alcohol-education programs.

#### H.E. 415. Community Health

2 s.h.

A study of the health needs of a community in relation to water supply, air purification, sewage and garbage disposal, food standards, housing, disease and pest control, and other related areas. Health problems are considered in the light of public health services and attention given to protective as well as corrective measures. The course is conducted through field trips, surveys, lectures, and the use of audio-visual aids. (Formerly Community Hygiene). Prerequisite: A basic course in Health Education.

# **Physical Education**

#### P.E. 410. Water Safety and First Aid

2 s.h.

This course includes intensive instruction in swimming, diving, water sports, boating, canoeing, water safety, and first aid. Students can qualify for Red Cross certificates during this course.

# P.E. 415. Movement Techniques and Rhythmic Accompaniment 2 s

This course is designed to develop skill and understanding of body movement techniques and the rhythmic accompaniment of such techniques. Lectures, reading assignments, demonstrations, and participation will be utilized to relate anatomical structure and function to these movement techniques and to develop teaching skill.

#### P.E. 420. Dance as an Art Form

2 s.h.

Experimentation in the use of time, space, and energy as applied to the dance medium. An exploration of modern dance as an art form with opportunity provided for individual and group choreography. Prerequisite: A course in Modern Dance.

# General Education Courses in Health and Physical Education

The following courses may be chosen by matriculated students (other than H. E. and P. E. majors) to meet the requirements in General Education outside their specific area of specialization:

H.E. 500. Health Aspects of Family Living, H.E. 501. School Safety, H.E. 527. Healthful School Living, P.E. 551. Philosophy of Recreation in School and Community, H.E. 411. School Health Services, H.E. 412. Alcohol Education Workshop, H.E. 415. Community Health, P.E. 410. Water Safety and First Aid, P.E. 420. Dance as an Art Form.

# DEPARTMENT OF HOME ECONOMICS

Graduate Advisor: DR. KATHARINE B. HALL

Graduate study in the Department of Home Economics is designed:

- 1. To provide an opportunity for home economics teachers in the New Jersey public schools to further pursue their professional preparation in an effort to improve their teaching skills.
- To provide an opportunity for students to extend, intensify, and enrich their undergraduate program of general education in order that they may become better informed and more responsible citizens of a changing society.
- 3. To assist students to acquire a more advanced and comprehensive grasp of the major problems, issues, and techniques of professional education.
- 4. To encourage the spirit of scientific inquiry, and creative, original, and independent thought by providing training and experience in educational research.
- 5. To provide experiences designed to develop in students desirable personal and social qualities of democratic citizenship.
- 6. To encourage a spirit of professionalism and assist the student to gain the necessary attributes for professional advancement.

# REQUIREMENTS FOR THE M.A. DEGREE IN HOME ECONOMICS

# Admission to Program

Home Ec. 531.

Matriculation normally will require a Bachelor's degree in Home Economics

fror					e or University.	.101		COHOL	mes
I.	Gei	neral E	duca	tion (s	ee Master's Degree Program Pattern)			6-12	s.h.
II.	Bas	ic Profe	essio	nal Ed	ucation (see Master's Degree Program F	att	ern)	6-9	s.h.
III.	Spe	cializat	ion				1	11-20	s.h.
	A.	Core c	ours	es requ	ired of all candidates			7	s.h.
		Home	Ec.	510.	Research Seminar Interdisciplinary Study of the Family Contemporary Issues in Home Economics	2 :	s.h.		
	B.	Empha	isis i	n Subje	ect Matter			4-10	s.h.
		At leas Home	Ec.	e half 1 520.	edit from the following. must be 500 numbered courses. Dynamics of Family Interaction The Management of Family	2 :	s.h.		
		Home Home Home Home	Ec. Ec. Ec. Ec. Ec.	540. 429. 427. 407. 403A.	Resources Child in the Family Family Sociology The Disadvantaged Family Consumer Economics Problems in Management Readings in Early Childhood Education	2 5 2 5 2 5 2 5	s.h. s.h. s.h. s.h. s.h.		
	C.	Free E						0-4	s.h.
		Home	Ec.	550.	New Findings in Nutrition	2 5	s.h.		

Home Ec. 560	. Clothing and Human Behavior	2	s.h.
Home Ec. 406	. Tailoring	2	s.h.
Home Ec. 420	. Teaching Family Living in the		
	Public High School	2	s.h.
Home Ec. 432	. Women in Contemporary Society	2	s.h.
Home Ec. 431	. Teacher-Parent Relations in Early		
	Childhood Education	2	s.h.
Home Ec. 426	. Home Management in the Secondary		
	School Curriculum	2	s.h.
Home Ec. 410	Experimental Foods	3	s.h.

Courses in other departments related to Home Economics, subject to approval by graduate advisor, may be selected.

# IV. Comprehensive Examination

A comprehensive written-oral examination is required of all candidates for the Master's degree with the exception of those students who elect Graduate 600, Master's Thesis, in which the student earns four semester hours credit.

#### **GRADUATE COURSES**

# Home Economics 510. Interdisciplinary Study of the Family 2 s.h.

To familiarize students with contributions which various academic disciplines (history, anthropology, biology, economics, as well as psychology and sociology) make towards a more comprehensive understanding of family life.

# Home Economics 511. Contemporary Issues in Home Economics 2 s.h.

A seminar dealing with timely issues in home economics with special emphasis on changes in society which affect the family. Attention is centered on problems of continuing concern.

# Home Economics 520. Dynamics of Family Interaction 2 s.h.

A critical review of concepts and theories, both psychological and sociological, which are currently used in understanding patterns and problems of family relationships.

# Home Economics 530. Management of Family Resources 2 s.h.

A study of the family as a decision-making unit directing its resources for more effective living. Philosophical, psychological, sociological and economic trends which have a direct influence on the family's ability to maximize its resource potential and utilization are included.

# Home Economics 531. Housing and the Family 2 s.h.

A study of the principles of family housing; analysis of location, structure, design, furnishings, and equipment as a setting for the physical and emotional development of the individual and the family.

# Home Economics 540. Child in the Family 2 s.h.

An intensive study of the theories and research related to child rearing technique including a critical analysis of factors influencing parental practices and their effects on the child.

# Home Economics 550. New Findings in Nutrition 2 s.h.

Recent developments in nutrition and a critical review of fundamentals. Prerequisite: Nutrition 306 or equivalent.

#### Home Economics 560. Clothing and Human Behavior 2 s.h.

An intensive study related to analysis of factors affecting appearance and satisfaction in clothing. The economic, sociological, and psychological aspects of clothing are studied in relation to the individual.

#### Home Economics 603. Advanced Studies in Home Economics 3 s.h.

Library or experimental research on specific problems of limited scope. Work may be taken in the following areas: (a) child and family (b) family and consumption economics (c) family housing (d) foods (e) nutrition (f) textiles and clothing. Prerequisite: Educ. 503.

# SENIOR-GRADUATE COURSES

#### Home Economics 403A. Problems of Management

This course is an analysis of personal and family activity and resources with special emphasis on variations among socio-economic groups. Specific study will be made of the following: problem clusters; value intensification and rank-ordering, commitment; spending patterns, work patterns, community, family and personal resources; internal and external influences on problem solving and creation. Experience is included to acquaint students with the management problems of families with different backgrounds from their home situation.

#### Home Economics 406. Tailoring

2 s.h.

Fundamental processes and procedures for constructing tailored garments, and the differences between dressmaking and tailoring techniques, are emphasized. A comparison is made between factory-made garments and custom tailoring.

#### Home Economics 407. Consumer Economics

This course is designed for study of the allocation of resources used by families to acquire meaningful living. Content includes: the sociological, psychological, and economic factors which influence American families' consumption patterns; spending plans; financial protection and security; credit; savings and investments; marketing systems and conditions; motivations as an economic unit functioning in the economic system.

#### Home Economics 410. Experimental Foods

This is a comparative approach to methods of food preparation with emphasis on newer techniques. Each student does experimental laboratory work on selected phases of food preparation.

#### Home Ec. 423. Seminar in the Supervision of Home Economics

This course is designed for cooperating teachers planning to work with home economics student teachers in the pre-service program at Montclair State College. The course deals with principles, methods, and techniques of leadership in improving the programs of home economics education.

#### Home Economics 426. Home Management in the Secondary School Curriculum

The purpose of this course is to integrate the understandings and knowledge of home economics with the theory and practices of management. Study includes factors affecting decision making and the use of family resources with emphasis on how these concepts can be in-corporated into home economics courses, materials, methods, and course developments for teaching home management.

# Home Economics 427. The Disadvantaged Family

2 s.h.

This course is a study of families with various kinds of disadvantages: social, economic, educational, physical, and cultural. Of primary importance, however, are families from lower socio-economic and minority groups. Cause and effect factors, community agencies, and curriculum development are some of the areas of study leading to understanding children from these backgrounds and orienting subject matter to their needs. Provision for individual, personal experiences will be part of the study.

#### Home Economics 429. Family Sociology

This course concentrates on analyzing, comparing, and organizing various viewpoints and studies of family patterns around the world, through history and among different socio-economic groups. An underlying theme is the influence of rapid social change on the stability of the family and of family-biased values.

#### Home Economics 431. Teacher-Parent Relations in Early Childhood Education

Techniques for organizing parent programs and meetings are presented. Topics included are program planning, use of consultation and community resources, and special methods and procedures for working with parents individually and in groups.

#### Home Economics 432. Women in Contemporary Society

2 s.h.

A study of the roles played by the modern American woman, her education, ambiguities, and dilemmas. Study includes trends, developments and accomplishments of women, educational needs, social and economical contributions to the family and culture, and the resolution of professional, personal and family needs, interests, and responsibilities.

#### Home Economics 433. Readings in Early Childhood Education

Analysis of important research, studies and literature pertaining to the education of pre-school children. Recent developments in the field of early childhood education arising out of such programs as Head Start, Montessori schools, and Summerhill are examined and related to existing theories of early childhood education.

# DEPARTMENT OF INDUSTRIAL EDUCATION AND TECHNOLOGY

Graduate Advisor: DR. CARL E. FRANKSON

Graduate work in the Department of Industrial Education and Technology is designed to help teachers of industrial arts (1) to become more proficient in teaching through study of recent trends and new developments in the field, (2) to improve organization of the industrial arts laboratory, (3) to provide a basis for work in administration and supervision. Advanced work in industrial arts and related fields which will meet needs and broaden professional experiences of industrial arts teachers is emphasized.

Individuals who have an undergraduate major in this area, but who do not wish to work toward a degree, may enroll in graduate courses in the department with the consent of the advisor.

# Laboratory

Photographic Technology2 s.h.Power Technology2 s.h.Electronics Technology2 s.h.Plastics Technology2 s.h.	
Historical and Contemporary	
Industrial Arts Literature	
Supervision of Industrial Arts	
Independent Studies in Industrial	
Arts	
minimum: 32 s.h.	
	Power Technology 2 s.h.  Electronics Technology 2 s.h.  Plastics Technology 2 s.h.  Historical and Contemporary  Industrial Arts Literature 3 s.h.  Supervision of Industrial Arts 3 s.h.  Independent Studies in Industrial  Arts 3 s.h.

A comprehensive written-oral examination is required of all candidates for the Master's degree with the exception of those students who elect Graduate 600, Master's Thesis, in which the student earns four semester hours credit.

Graduate Thesis

Subject to approval by the graduate advisor and the departmental committee.

# **GRADUATE COURSES**

NOTE: Previous course numbers are enclosed in parenthesis. Students are not permitted to enroll in courses they have previously taken under other titles and/or course numbers.

# Ind. Ed. 501. Curriculum Content and Course Organization 3 s.h.

Curriculum construction techniques used in developing a program of industrial arts are studied. Special emphasis is placed on the development of industrial arts courses and instructional materials.

# Ind. Ed. 502. Shop Planning and Equipment Selection 3 s.h.

Principles of planning and equipment selection for modern industrial arts are studied. The practical application includes architectural aspects, floor plan layouts, equipment selection, bid preparations, and construction of scaled laboratory models.

# Ind. Ed. 503. (508) Historical and Contemporary Industrial Arts Literature 3 s.h.

Published material related to industrial arts is surveyed to determine its applicability to laboratory teaching and professional improvement. This includes historical writings on the development of industry and industrial education, research literature in the field, published materials provided by corporations and government agencies, and pertinent reference works, handbooks, and periodicals.

# Ind. Ed. 504. (511) Supervision of Industrial Arts

3 s.h.

Principles and practices of supervision, as related to the modern industrial arts laboratory are discussed and evaluated. Special attention is given to supervisory techniques, budget supplies, inventories, maintenance, safety, and upgrading of in-service teachers.

# Ind. Ed. 507. Principles and Philosophy of Vocational-Technical Education

2 s.h.

The coordinators of cooperative industrial education programs are provided with the opportunity to study the principles and philosophy of vocational-technical education. The course content presents a brief history of the cultural, social, governmental, economic and technical forces which affected the development of vocational-technical education. The organization and function of the state divisions of vocational education are presented.

# Ind. Ed. 508. Problems in Organizing and Teaching Cooperative Industrial Education Programs 2 s.h.

The coordinator is acquainted with the various practices for coordinating high school programs with the needs for local industry. Emphasis will be placed on the supervising responsibilities within the school, and the cooperation required with public and private agencies.

# Ind. Ed. 509. Curriculum Construction in Vocational-Technical Education

2 s.h.

A survey of vocational curriculum construction techniques designed to meet the needs of related and laboratory teaching and school-work programs. Emphasis will be placed on curriculum materials especially adapted to the needs of part-time cooperative trade occupational programs.

# Ind. Ed. 601. Independent Study in Industrial Arts

3 s.h.

This course is designed to allow students to pursue study on individual problems under the guidance of a sponsoring faculty member. In addition, credit may be obtained for Ind. Ed. 601 upon completion of an approved industrial course related to the student's special area of interest. Registration for this course is by permission of the advisor only.

# Ind. Ed. 603. Research Seminar in Industrial Arts

3 s.h.

Two patterns of research are considered in this seminar: (1) Industrial research techniques with materials and processes as they may be adapted to industrial arts programs in public school, (2) Education research techniques as they are applied to problems in industrial arts education. Prerequisite: Educ. 503.

#### SENIOR-GRADUATE COURSES

#### Ind. Ed. 405. Field Studies of Industry

3 s.h.

A broad range of industrial firms is visited to note and evaluate the processes used, the materials employed, the working conditions instituted, and the labor relations practiced. Every attempt is made to visit representative industries in the metropolitan area.

# Ind. Ed. 406 A, B. Cooperative Industrial Work Experience

2 s.h.

Through observation, discussion, written reports and actual supervised experience, the student should become more aware of the attitudes, skills, and knowledge required by modern industry and his responsibility as a public school teacher to this area of society.

The student is aided in finding meaningful summer employment which is directly related to his planned teaching area. He will be paid wages by the cooperating company for his services to it. Course may be taken twice providing second experience is different from the first. (A and B).

#### Ind. Ed. 407. Cooperative Industrial Externship

2 s.h.

Advanced study and research of modern American Technology utilizing the advanced technical knowledge and facilities of cooperating industrial firms. Open to selected graduate and undergraduate students. Participants receive a weekly stipend from the industry for six weeks.

A unique feature of this program is that the College Professor in charge is also a participant and benefits at this particular level.

#### Ind. Ed. 412. Design in Industry

3 s.h.

The industrial designer's approach to the design dictates the material and activities in this course. Students engage in all the activities involved in the design of a product for production and purchase in contemporary society. Open to senior or graduate Industrial Education and Technology and Fine Arts Students.

# Ind. Ed. 423. Architectural Drafting, Residential

2 s.h.

The design and drafting of residential structures is studied. Emphasis will be placed on house construction, architectural drafting techniques and the writing of specifications. Prequisite: Ind. Ed. 121 or approval of the instructor.

#### Ind. Ed. 433. Photographic Technology

2 s.h.

Industrial equipment, materials, and processes are used and evaluated in connection with a variety of experiences in industrial photography. Open to senior or graduate Industrial Education majors and others meeting prerequisite—Ind. Ed. 141 and 142 or approval of the instructor.

#### Ind. Ed. 442. Conservation of Basic Industrial Materials

2 s.h.

Students, while living for ten days at the New Jersey School of Conservation, Stokes State Forest, study the origin, development, use, and consumption of basic materials as they exist in nature, by taking field trips to resources and industries, by employing a variety of instructional aids, and by talking with specialists in each area.

#### Ind. Ed. 443. Wood Technology

2 s.h.

The course encompasses the origins, developments and advances made in the fields of woods. Emphasis is placed upon the nature, identifications, physical characteristics and properties of woods. Stress is given to the study of occupational groups, manufacturing process, industrialization, and mechanization in the wood industry. Prerequisite: Ind. Ed. 342 or approval of instructor.

# Ind. Ed. 456. Plastic Technology

2 s.h.

An advanced technical course in the industrial area of plastics. Study is based upon foundation materials and concerned with developing technical proficiency and mechanical skill in regard to injection molding, extension molding, compression molding, transfer molding and laminating. Prerequisite: Ind. Ed. 381 or equivalent or permission of the instructor.

#### Ind. Ed. 463. Metal Technology

2 s.h.

The study and discussion of current industrial metal working concepts and processes, including quality control, metalurgy, explosive forming, chemical machining, electric discharge machining, numerical control, and principles of automation. Laboratory activities will afford the opportunity for students to become involved in mass production techniques and individual experiments. Prerequisite: Ind. Ed. 262 or approval of the instructor.

#### Ind. Ed. 473. (431) Electronic Technology

2 ch

An overview of our current electronic technology with emphasis placed upon the applications of electronic circuitry to communications and control systems. Prerequisites for the course are a basic knowledge of A.C. and D.C. circuit theory and a familiarization with power supply, amplifier, and oscillator circuits.

#### Ind. Ed. 483. (432) Power Technology

2 s.h.

An advanced technical study of internal and external combustion engines and a fluid power. In addition to the study of established engines, power sources in the developmental stage will be examined. Much of the course work will consist of work on individual problems in power. Prerequisite: Ind. Ed. 252 or permission of the instructor.

# Ind. Ed. 496. (421) Jewelry Making and Lapidary

2 s.h.

Through laboratory experiences students have the opportunity to develop lapidary and jewelry making skills. They will design pieces that will involve casting and wrought jewelry processes. The lapidary experiences cultivate skills in sawing, shaping, polishing, and mounting stones to exhibit their inherent qualities.

#### General Education Courses in Industrial Arts

The following courses may be chosen by matriculated students (other than Industrial Education and Technology majors) to meet the requirements in General Education outside their specific area of specialization:

Ind. Ed. 405, 406, 412, 433, 456, 496.

# DEPARTMENT OF MATHEMATICS

Graduate Advisor: PROFESSOR PAUL C. CLIFFORD

The courses listed in the Mathematics offering are designed to meet three specific needs. To meet the needs of the teacher of mathematics, the department offers a Masters of Arts Degree in Mathematics. To meet the needs of those interested in an extensive study of both mathematical theory and its applications in science and industry, the department offers a Masters of Arts Degree in Pure and Applied Mathematics. And for those whose mathematical education needs to be updated, the department offers a series of courses and workshops. The courses numbered from 400 to 419 and from 500 to 519 are for this purpose. Such courses may not be credited towards either M.A. degree without special permission from the Graduate Advisor.

#### REQUIREMENTS FOR MATRICULATION

A candidate for the Master of Arts Degree in Mathematics should consult the Graduate Advisor of the Mathematics Department before matriculation since the choice of graduate courses should be adjusted to the preparation acquired in undergraduate work. The student's work program, for a minimum of thirty-two semester-hours of work, is prepared in consultation with the Graduate Advisor. Any changes in the work program are made only with the written approval of that advisor.

The candidate for the M.A. degree in Pure and Applied Mathematics must present an undergraduate major of at least 3 semester hours in mathematics. Courses in engineering and science that have a substantial mathematical content may be submitted toward this requirement.

The candidate for the M.A. degree in Mathematics must present an undergraduate major of at least 24 semester hours.

# REQUIREMENTS FOR THE M.A. IN PURE AND APPLIED MATHEMATICS

# REQUIREMENTS FOR THE M.A. IN MATHEMATICS

- General Education (see Master's Degree Program Pattern)
   Basic Professional Education (see Master's Degree Program Pattern)
   s.h.
   Specialization:
   11-20 s.h.
  - Each candidate must take at least one course in each of the following sets:

    Math. 521 or 525

Math. 554 or 555	2	s.h.
Math. 570, 571 or 574	2	s.h.
Math. 590	2	s.h.
Electives (after consultation with Graduate Advisor)	0-8	-s.h.

Minimum: 32 s.h.

# IV. Departmental Examination

A final examination in mathematics is given to all candidates prior to the conferment of the degree. This examination is general in nature and is designed to test the candidate's maturity of thought in mathematics and/or mathematics education.

#### **GRADUATE COURSES**

NOTE: Previous course numbers are enclosed in parentheses, Students are not permitted to enroll in courses they have taken previously under other titles and/or course numbers.

# Math. 510. (603A) Workshops on Junior High School Mathematics I 2 s.h.

This course provides the necessary mathematical background to understand and interpret current curriculum recommendations in the Junior High School. Suggestions for implementation of new topics discussed. Areas covered include: presentation and structure of the number system, mathematical systems, foundations of algebra, and probability.

# Math. 511. (603B) Workshop on Junior High School Mathematics II 2 s.h.

This course is a continuation of Math 510. Major attention is given here to the areas of geometry and measurement.

# Math. 515. (602A) Workshop on Senior High School Mathematics I 2 s.h.

This course is designed to provide teachers with increased insight into contemporary programs of mathematics. Emphasis is placed on mathematical principles and concepts, together with suggestions for implementation of new topics in revisions of secondary school mathematics programs. Major attention is given to programs of algebra in the high school curriculum.

# Math. 516. (603B) Workshop on Senior High School Mathematics II 2 s.h.

This course is a continuation of Math. 515, with similiar aims and objectives. Major attention is given here to implementation of modern programs of geometry, as well as to the senior year program in high school mathematics.

#### Math. 520. (517) Set Theory

2 s.h.

This course develops the groundwork on which most of modern mathematics depends. Topics include: historical development, classical paradoxes, relations, mappings, equivalence, ordered sets, choice functions, Zorn's lemma, transfinite cardinal and ordinal algebra.

#### Math. 521. (518) Theory of Functions of Real Variables

2 s.h.

The fundamental properties of real numbers and the elementary properties of functions of real variables are systematically developed. Among the topics considered are: continuity, differentiability, integrability, algebraic and transcendental functions, hyberbolic functions, and infinite series. Prerequisite: Math. 425.

#### Math. 525. (519) Theory of Functions of Complex Variables

s.l

The fundamental properties of complex numbers and elementary properties of functions of complex variables are developed. These include the properties of mapping, line integrals, Cauchy-Goursat Theorem, and conformal mapping. Prerequisite: Math. 425.

#### Math. 531. (503) Abstract Algebra

2 s.h.

This course is a study of unique functionization domains, extension fields, and the solution of the general nth degree equation, Prerequisite: Math. 330 or the equivalent.

# Math. 535. (504) Linear Algebra

2 s.h.

This course develops the theory of finite dimensional linear spaces. Topics include: linear vector spaces, linear transformations, inner product spaces, bilinear and quadratic forms, Euclidean and unitary spaces. Prerequisite: Math. 430 or equivalent.

# Math. 540. (523) Theory of Probability

2 s.h.

This course develops probability theory as a mathematical model describing random phenomena. Topics include: basic probability theory for finite sample spaces, random variables and functions of random variables, particular probability distributions, certain limit theorem, sequences of random variables and Markov processes. While the emphasis is on mathematical proof, a variety of applications in both the physical and the social sciences are developed. Prerequisite: 340 or 412.

#### Math. 542. (524) Introduction to Mathematical Statistics

2 s.h.

This course is concerned with making inferences from sample data and with evaluating risks connected with these procedures. Topics include: sampling distributions, point and interval estimation, tests of hypotheses, regression and correlation, elements of analysis of variance and nonparametric statistics. Prerequisite: Math. 443 or 540.

# Math. 545. Techniques of Statistical Control

2 s.h.

Statistical techniques for analyzing process variability, establishing control and setting standards. Topics include: Parete analysis, frequency distribution analysis, control charts for variables, control charts for attributes, simplified control procedures, acceptance sampling by attributes and variables and adaptations of these procedures for designed experiments.

#### Math. 547. Design and Analysis of Experiments

2 s.h.

This course emphasizes the basic ideas underlying modern developments in the design and analysis of experiments. Topics include: experimental error, Randemization, factorial experiments, randemized blocks, Latin squares, fractional replication, response surface together with regression, correlation and the analysis of variance and covariance. Prerequisite: Math. 443 or equivalent.

#### Math. 554. (532) Projective Geometry

2 s.h.

The methods of synthetic and analytic projective geometry are compared and used to emphasize the fundamental concepts of Euclidean Geometry. Emphasis is placed upon the dependence of many common properties and theorems of Euclidean geometry and upon the properties of lines, parallelism, perpendicularity, similiarity of figures, and the definition of distance. Prerequisite: Math. 450.

#### Math. 555. Differential Geometry

2 s.h.

The application of vectors to the study of classical three dimensional geometry. Topics include: the theory and application of space curves, surface curvature, Geodesics and the first and second fundamental forms.

#### Math. 560. (512) Numerical Analysis

2 s.h.

This course deals with the determination of functions from observed experimental data. Among the topics considered are: finite differences, symbolic operators, differencing, interpolation formulae, the method of least squares, and harmonic analysis. The course is designed to show the nature of mathematics as an applied science.

#### Math. 561. (513) Computer Programming

2 s.h.

This course is concerned with the use of a computer to solve problems, including some secondary school mathematics. Problem solving methods suitable for a store-program computer and the programming languages are considered. Prerequisite: Math. 560 or permission of the instructor.

#### Math. 563. (551) Mathematics in Social Science

2 s.h.

This course examines selected applications of mathematics in such fields as economics, psychology, sociology, and management sciences. Applications to these areas of differential equations, matrices, and probability and statistics are considered.

# Math. 565. (552) Applied Mathematics I

2 s.h.

This course consists of selected topics in matrices, Fourier series and vector analysis with emphasis on their applications to the physical sciences and the physical meaning of the results.

#### Math. 566. (553) Applied Mathematics II

2 s.h.

This is a continuation of Mathematics 565. Topics from partial differential equations, the calculus of variables, and series solution of Legendre's and Bessel's equations are treated. Prerequisite: Math. 565.

# Math. 570. (501) Administration and Supervision of Mathematics 2

This course is concerned with the problems met in organizing and supervising the teaching of mathematics. The topics considered are the functions and qualifications of the supervisor of mathematics, in-service training of teachers, demonstration lessons, professional attitude and preparation of teachers, department meetings, selection of texts, current problems, research; and the basis for determining objectives.

# Math. 571. (529) Curriculum Construction in Mathematics

2 s.h.

In this course a careful study is made of contemporary programs proposals for the mathematics of grades K through 12. Consideration is given to the problem of implementation of current recommendations. Examination is made of the mathematical concept underlying various programs.

# Math. 572. (507) Teaching of General Mathematics

2 s.h.

This course is concerned with mathematics programs for the non-college-bound high school student. Reports and recommendations from curriculum studies are examined. Among the topics considered are: basic characteristics and needs of non-academic students, preparation and use of resource materials, classroom teaching techniques, and methods of motivation. Emphasis is given to the development of suitable curricula for non-academic students.

#### Math. 573. (530) Mathematics Materials for the Teacher of Mathematics 2 s.h.

This course is concerned with the adaptation and use of materials to motivate and improve the teaching of high school mathematics. Particular attention is given to the equipment needed for a modern mathematics laboratory; to the effective use of such audio-visual equipment as the overhead projector; to the use of mathematical films and film-strips; to the construction and use of mathematical models; and to books, periodicals, and pamphlets needed for the school and for the teacher's library. Material available for individual and club activities in mathematics.

#### Math. 574. Problem Analysis in Secondary Mathematics

2 s.h.

The psychology and techniques of solving. Discovery and heuristic methods. Intuitive and inductive reasoning in the solution of non-routine problems from high school mathematics. Problem formation and test construction.

#### Math. 590. (640) Research Seminar in Mathematics Education

2 s.h.

This course is designed to give graduate students an opportunity to investigate and apply the techniques of research in the field of mathematics education. Various projects are discussed and each member selects and presents a research topic on his own. Prerequisite: Ed. 503.

#### SENIOR-GRADUATE COURSES

#### Math. 403. (423) Techniques and Applications of Statistics

2 s.h.

This course is designed as a basic survey of statistical techniques as applied in the social and behavioral sciences. Fundamental concepts and assumptions are stressed and justified experimentally, although mathematical proof of theorems is strictly limited. Topics include: descriptive statistics, elements of probability, sampling procedures and sampling statistics, tests of hypotheses and simple design of experiments. Students are expected to have an adequate background in high school algebra. This course is offered as a general education elective and may not be taken for credit by mathematics majors. Prerequisite: Math. 105.

#### Math. 406. (410) Mathematics of Finance

2 s.h.

This course introduces the elementary theory of simple and compound interest and leads to the solution of practical problems in annuities, sinking funds, amortization, depreciation, stocks and bonds, installment buying, and savings and loan associations. It discusses the mathematics of life insurance covering the following: the theory of probability as related to life insurance; the theory and calculation of mortality tables; various types of life annuities and insurance policies and reserves. This course gives a helpful background to the mathematics teacher and aids the student of economics and insurance.

#### Math. 411. Elements of Mathematical Thought

2 s.h.

This course acquaints students having a limited background in mathematics with the logical structure of mathematics. There is an emphasis on postulational foundations and the reasoning process itself. Topics include: the nature of mathematical knowledge, the origin and influence of logical systems, essentials of logical reasoning, and examples of logical systems from algebra and geometry.

#### Math. 412. (422) Introduction to Probability and Statistics

2 s.h.

This course surveys the major concepts of elementary probability and statistics and serves as an introduction for students who have had no previous work in this field. Topics include: probability theory for finite sample spaces, elements of combinatorial theory, binomial distributions, continuous distributions, functions of random variables, and problems of estimation and tests of significance. Students credited with Math. 340 (307) may not take this course for credit.

#### Math. 415. (405) History of Mathematics

2 s.h.

This course strives to present a comprehensive history of elementary mathematics. Separate histories of geometry, number theory, algebra, calculus and infinite processes are developed with consideration of mathematical problems solved in their historical content. Among the great mathematicians considered are: Eudoxus, Pythogoras, Euclid, Archimedes, Appolonius, Diophantes, Fibonacci, Gardan, Vieta, Napier, Descartes, Fermat, Newton, Liebritz, Euler, Gauss, Riemann and Ramanjan.

#### Math. 416. (409) Elements of Finite Mathematics

2 s.h.

Topics considered in this course are those dealing with finite, rather than infinite sets. Included are such topics as: sentences and statements, truth tables, sets, Boolean algebra, and linear programming. Applications of mathematical techniques in the social sciences are stressed throughout the course.

#### Math. 417. (453) Differential Calculus

3 s.h.

Concepts of differential calculus are developed for science students who have taken one year of college mathematics. Topics include: functional relationships, slope, limit, continuity, graphical representations of science problems, differentiation of algebraic and transcendental functions, geometric and physical application of derivatives, velocity, and acceleration in curvilinear motion. Applications are developed utilizing the scientific background of the students. Students credited for Math. 221 may not take this for credit.

#### Math. 418. (454) Integral Calculus

3 s.h.

Concepts of integral calculus are developed for students who have completed Math. 417 (453) or equivalent. Topics include: integration procedures, solid analytic geometry, and geometric and physical applications of the definite integral in two and three dimensional problems. Applications utilize the scientific background of the students. Students credited with Math. 222 may not take this for credit,

#### Math. 419. (404) Modern Mathematical Literature

2 s.h.

The objective of this course is to familiarize the student with the mathematical literature available to him as a mathematics teacher. The student is expected to examine a variety of publications to determine the content, worth, and possible use.

#### Math. 420. (415) Differential Equations

2 s.h.

Applications of differential equations and their standard methods of solution are treated in this course. Topics are: linear differential equations of the first degree and of the first and higher orders, linear equations of the nth order with constant coefficients, linear equations of the second order, exact and total differential equations, simultaneous equations, numerical approximations, and series solutions.

#### Math. 425. (407) Advanced Calculus I

3 s.h.

This course develops the calculus of a function of one variable as a mathematical system. On the basis of postulates for the real numbers, the concepts of function, limit, sequence, infinite series, power series, continuity, uniform continuity, differentiation, and integration will be rigorously developed. Topics considered include: Archimedean principle, density of the rationals, intermediate value theorem, Heine-Borel theorem, mean value theorem, Cauchy convergence criterion, existence theorems, and uniform convergence theorems.

#### Math. 426. (408) Advanced Calculus II

3 s.h.

In this course the calculus of functions of several variables is thoroughly tested. Among the topics are: the theory of Fourier series, Green's theorem, Stoke's theorem, divergence theorem, implicit function theorem, inverse function theorem, Riemann-Lebesque lemma and Cesaro convergence.

# Math. 428. (452) Introduction to Topology

3 s.h.

The aim of this course is to introduce the student to some of the terminology, concepts, and methods of a rich branch of mathematics which has proved to be a fertile area for current research in mathematics. Special emphasis is to be placed on the "topological" structure of the familiar real line (set of real numbers), ordinary Euclidean space, and metric spaces in general. This course is designed to provide a background for both understanding more fully the results of classical analysis (calculus), and for studying "modern" analysis.

# Math. 430. (414) Vectors and Matrices

3 s.h.

This course is a study of vector spaces and matrix algebra. Topics include: vectors and vector spaces, systems of linear equations, matrices, determinants and linear transformations. Prerequisite: Math. 330.

#### Math. 433. (417) Theory of Numbers

2 s.h.

This course offers a systematic development of classical number theory along with a discussion of the historical background. The treatment employs current set-theoretic notation to make the traditional topics more meaningful. It includes such topics as prime and composite numbers, Euclid's algorithm, congruences, diophantine equations, quadratic residues, and the Euler-Fermat theorems.

#### Math. 436. (480) Elements of Logic

2 s.h.

This course develops an understanding of methods of reasoning used in the mathematical sciences. The point of view of elementary processes of symbolic logic are studied. Background materials are included for teaching of logical concepts in secondary schools.

#### Math. 443. (413) Statistics: Theory and Applications

3 s.h.

After a brief review of probability in the discrete case, this course develops the general theory of probability functions and distributions for first one and then several random variables. Topics include: Mathematical expectation, continuous random variables, distribution of sums of random variables, sampling distributions, points and interval estimation, regression and correlation, tests of hypothesis. Various classroom experiments are used to guarantee sample data. Prerequisite: Math. 340.

# Math. 450. Foundations of Geometry

3 s.h.

In this course a study is made of the Hilbert postulates and the Birkhoff-Beatley Postulates of Euclidean Geometry. The course includes a comparison of the non-Euclidean geometries and a brief introduction to synthetic and analytic projective geometry. Prerequisite: Math. 350.

#### Math. 460. Introduction to Applied Mathematics

2 s.h.

Applications of mathematics to the physical and biological sciences will be discussed. The uses of various mathematical concepts in the PSSC, CHEM Study, BSCS and ECCP curricula will be examined. Topics include: applications of vectors, matrices, progressions, series, limit concepts, digital and analog computers, and analysis of experiments. The vehicle will be the specific applications in selected areas of the biological sciences and the physical sciences.

# Math. 470. (401) Teaching of Mathematics—Senior High School 2

This course covers the selection, organization, and presentation of mathematics in the senior high school. Topics include: organization of classroom activities, lesson planning, techniques of motivation, evaluation, use of multisensory aids, and applications of established principles of learning. These topics will emphasize the methods and materials of teaching contemporary programs of geometry, intermediate algebra, and twelfth-grade pre-college mathematics. Observation and participation in the campus demonstration high school is required.

# Math. 472. (440) Contemporary Programs in Secondary Mathematics 2 s.h.

This course is concerned with an exploration of contemporary curricula in secondary mathematics with emphasis on those programs which are currently being implemented. The recommendations of various curriculum studies are explored. Major emphasis is given to the programs of grades eleven and twelve, including advanced placement.

#### Math. 495. Research in Mathematics

3 s.h.

These seminars enable outstanding junior and senior mathematics majors to do independent work in areas not included in the regular curriculum. Class meetings are of seminar type, and emphasis is on independent investigations that are conducted by the student in consultation with the instructor. The student prepares written reports, gives oral reports, and is subject to both written and oral examinations. Each registration in this course requires approval by the Chairman of the Mathematics Department and of the instructor.

# General Education Courses in Mathematics

The following courses may be taken my matriculated students (other than Mathematics majors) to meet the requirements in General Education outside their specific area of specialization. Students should confer with the graduate advisor concerning the mathematical background needed for each course.

Math. 403—Techniques and Applications of Statistics, 406—Mathematics of Finance, 411—Elements of Mathematical Thought, 412—Introduction to Probability and Statistics, 415—History of Mathematics, 416—Elements of Finite Mathematics, 417—Differential Calculus, 418—Integral Calculus

# DEPARTMENT OF MUSIC

Graduate Advisor: DR. DOROTHY MORSE

Graduate study in the Department of Music is designed:

- to offer music teachers in the New Jersey public schools an opportunity to gain further professional preparation for the improvement of their teaching skills.
- to provide an opportunity for students to deepen and enrich their program
  in general education; to enable them to acquire a more advanced grasp
  of the problems in professional education; and to move forward in their
  fields of specialization;
- to encourage the spirit of scientific inquiry and creative, original, and independent thought by providing training and experience in educational research;
- 4. to encourage the teacher to gain the requisite status for professional advancement.

# Admission to the Program

A student with an undergraduate major in music is admitted subject to general College graduate admission requirements as stated elsewhere in this catalog.

# Requirements for the M.A. Degree in Music

I.	Ge	neral	Educe	ation	(see	Master's	B Degree	Program	Pattern)		6-12	s.h.
II.	Ва	sic Pi	ofessi	onal i	Educ	ation (se	e Master	's Degree	Program	Pattern)	6-9	s.h.
	A.	Edu	cation	503	*****		•••••				2	s.h.
	В.	Elec	tives								. 4-7	s.h.
ш.	Spe	eciali	zation	Cour	ses						11-20	s.h.
	A.	Requ	uired o	of all	Cand	lidates-						
						in Rese					2	s.h.
	В.					lized cou on basis	rses chos of need.	sen by				

- IV. Comprehensive Examination (See requirements for M.A. Degree sub-heading Comprehensive Examination.)
- V. Thesis Optional (See Thesis.)

#### **GRADUATE STUDY**

# Music Methods

sic Mellious		
Music 520A.	Problems and Materials of Instrumental Music	2 s.h.
Music 520B.	Problems and Materials of Choral Music	2 s.h.
Music 521A.	Classroom Methods: Piano	2 s.h.
Music 521B.	Classroom Methods: Brass	2 s.h.
Music 521C.	Classroom Methods: Woodwinds	2 s.h.
Music 521D.	Classroom Methods: Strings	2 s.h.
Music 521E.	Classroom Methods: Percussion	2 s.h.
Music 521F.	Classroom Methods: Vocal	2 s.h.

History and Literature		
Music 406. Modern Music	2	s.h.
Music 407. Development of the Opera		
Music 413. Masters of the Symphony		
Music 424. Survey of Wind Instrument Music		
Theory and Harmony		
Music 417. Theory of Sound	2	s.h.
Music 511. Aural Theory		
Music 512. Advanced Aural Theory (Prerequisite: Music 511)		
Music 513. Composition (Prerequisite: Music 511)		
Music 516. Advanced Instrumentation (Prerequisite: Music 511)	2	s.h.
(Note: Candidates who pass, by examination, Music 511 Aural Theory take Music 512 Advanced Theory)	7, 1	nay
Skills		
*Music 503A. Applied Music I: Primary Instrument	2	s.h.
*Music 503B. Applied Music II: Primary Instrument	2	s.h.
*Music 510A. Applied Music I: Secondary Instrument	1	s.h.
*Music 510B. Applied Music II: Secondary Instrument		
Music 530. Advanced Conducting	2	s.h.
*See Special Tuition Charges For Applied Music Study		
Research		
Graduate 600 Master's Thesis	4	s.h.
Minimum:		
Withhitoti.	<i>-</i> <u>-</u> <u>-</u> -	G.H.
Special Tuition Charges For Applied Music Study		

Instruction in applied music (Mus. 503A, 503B, 510A, 510B) is on an individual basis and a special fee is charged in addition to the regular college fees and tuition. Students registering in a one semester-hour course pay an additional \$75.00 and those in a two semester-hour course, \$150.00 for private instruction.

Before registering in applied music, consult with the Graduate Advisor for the Music Department.

# **GRADUATE COURSES**

#### Applied Music I, Primary Instrument Advanced study in a familiar medium for the serious and accomplished student. The course will be adapted to the musical and technical needs of the individual with opportunities available for recital performances. Fifteen one-hour lessons, private instruction. Admission by examination only.

# Music 503B. Applied Music II: Primary Instrument 2 s.h. A continuation of Music 503A.

Applied Music I: Secondary Instrument 1 s.h. An elementary course, both for the beginner and for the student with limited background. Fifteen half-hour lessons per semester, private instruction. Admittance by audition.

#### 1 s.h. Music 510B. Applied Music II: Secondary Instrument A continuation of Music 510A.

# Music 511. Aural Theory

2 s.h.

Review of diatonic harmony (figured bass, triads, sevenths and ninth chords in all inversions, modulation, etc.) through extensive dictation, sight singing, harmonization, analysis, and creative use of materials.

#### Music 512. Advanced Aural Theory

2 s.h.

Chromatic harmony presented as a continuation of Music 511. Altered chords as found in the music of Bach, Beethoven, Brahms, and Tchaikovsky. Included are dictation, sight singing, harmonization, analysis, and creative writing. Prerequisite: Music 511 or equivalent.

# Music 513. Composition

2 s.h.

Practice in the writing of variations, small forms, songs and music for small ensembles. Analysis and workshop performance are included. Prerequisite: Music 511 or equivalent.

#### Music 516. Advanced Instrumentation

2 s.h.

A workshop course in instrumentation as applied to both orchestra and band. Principles of Tutti instrumentation as applied to both media. Scoring for smaller ensembles. Study of instruments, instrumental families and their possibilities and best uses. Direct instrumental setting of school, songs, hymns, etc., without the writing of a score. Elements of band military march construction and scoring. Every student will hear at least one of his instrumentations played by the college orchestra or band. Prerequisite: Music 511 or equivalent.

#### Music 520A. Problems and Materials of Instrumental Music

2 s.h.

This course aims to (1) evaluate teaching experiences, (2) develop an understanding of the problems of the instrumental organization in the school, (3) develop additional knowledge and understandings of the literature for orchestra, band, and a variety of small ensembles at all levels.

#### Music 520B. Problems and Materials of Choral Music

2 s.h.

This course provides a survey of the choral repertoire for accompanied and a cappella groups, for changed, unchanged, changing, and mixed voices. The course includes historical and stylistic characteristics of the choral repertoire. Materials for small groups, as well as large ones, are analyzed for performance value. Criteria for evaluating available materials, program building for all school needs, including holidays, festivals, radio and television performances are an integral part of the course. The members of the class comprise a laboratory chorus for the study of the repertoire.

#### Music 521. Classroom Methods

2 s.h. each

Elementary and secondary classroom methods in the various media; the course deals with the principles, materials, and methods used in teaching class instrumental and vocal music. Especially designed for teachers seeking new ideas in teaching basic principles of the various instruments, including voice.

521A. Piano

521B. Brass Instruments

521C. Woodwind Instruments 521D. Stringed Instruments

521E. Percussion Instruments

521F. Vocal Classes

# Music 530. Advanced Conducting

2 s.h.

A course in basic conducting practice with emphasis on the practical problems of public school instrumental work. Technique of the baton, clef reading and simple score playing at the piano, transposition, score reading. technique of rehersal and drilling, conducting of instrumental ensemble accompaniments. Prerequisite: A college course in instrumental or vocal conducting or its equivalent in practical experience satisfactory to the instructors.

#### Graduate 600. Master's Thesis

4 s.h.

#### Music 603. Seminar in Music Education

2 s.h.

This course is designated primarily to provide an opportunity for graduate students in music education to investigate and apply the techniques of research in the music education field. Prerequisites: Matriculation for M.A. degree, Educ. 503, or concurrently registered in Educ. 503.

## SENIOR-GRADUATE COURSES

## Music 406. Modern Music

2 s.h.

This course is planned to acquaint the student with contemporary music and is a continuation of Music 208. It includes a study of the music of Debussy, Stravinsky, Schoenberg, Berg, Bartok, Hindemith, etc. Students are expected to compose short pieces in contemporary idioms. Prerequisite: a college course in music history or its equivalent satisfactory to the instructor.

#### Music 407. Development of the Opera

2 s.h.

This course deals with the origin, development, and the characteristics of opera in the Italian, French, German, and Russian schools. Class analyses are made of representative operas of these schools. Special attention is given to building an ear repertory of operatic music heard over the radio.

#### Music 413. Masters of the Symphony

2 s.h.

This course helps to provide the student with an understanding and appreciation of the classic and romantic symphony through the study of the symphonies of Haydn, Mozart, Beethoven, Schubert, Schumann, Tchaikovsky, and Brahms. Class analyses, including the reading of scores, are made of representative symphonies.

#### Music 417. Theory of Sound

2 s.h.

The phenomena of sound as related to hearing, to music theory, to musical instruments, to the reproduction of music (phonograph, etc.) and to the conditions under which music is heard.

#### Music 424. A Survey of Wind Instrument Music

2 s.h.

This course includes music for full band, small ensembles, and solos with emphasis on literature available for brass and woodwind players in the elementary and the high school. A laboratory band as well as numerous small ensemble groups are formed by members of the class so that performance of all music under consideration is possible. Special attention is given the music originally composed for wind instruments. New music from all publishers is available for examination and evaluation.

#### **General Education Courses in Music**

The following course may be chosen by matriculated students (other than Music majors) to meet the requirements in General Education outside their specific area of specialization:

## Music 413. Masters of the Symphony

2 s.h.

## DEPARTMENT OF PSYCHOLOGY

Graduate Advisor: DR. HERBERT J. HAUER

The Master of Arts degree in the field of Psychology is designed to provide advanced work. Upon completion of the program the student may terminate his formal studies, go on for a professional diploma and certification as a school psychologist, or pursue a higher degree.

The School Psychologist Certification program is designed to provide the background for certification in school psychology. The professional diploma program will help meet the need for certified school psychologists by offering an integrated sequence of courses together with closely supervised training. Upon completion of the program, the student may go on for a higher degree.

The demand for certified school psychologists in New Jersey is urgent. Since the first Beadleston law in 1954, the demand has increased tremendously. School Administrators cannot find qualified personnel to meet the need.

## Requirements for Admission to the Program

Candidates for the M.A. program must meet admission requirements of the Graduate Division of the College, except for the requirements of a N.J. teaching certificate, as stated in the 1967-68 Graduate Bulletin.

In addition, candidates for the school psychologist's diploma (beyond the M.A.) must meet the following conditions:

- 1. High achievement on the Graduate Record Examinations. A score of 550 or better on the verbal section of the Aptitude Test.
- 2. Candidates must obtain a raw score of 55 or better on the Miller's Analogies Test.
- 3. Candidates will be required to submit recommendations from at least two individuals who can attest to their ability to cope with advanced graduate work and can comment on their suitability for the program.
- 4. Approval by a School Psychology Admissions after a personal interview and approval by the Department Chairman.
  - 5. Hold a N.J. Standard Teacher Certificate.
  - 6. Evidence of one year of teaching experience.

Failure to meet the standards on any one of the above requirements will not automatically rule out an applicant for admission or completion of the program. Variations in test scores will be considered.

# REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN PSYCHOLOGY

I.	Basic Requir	rement	5	15	s.h.
	Ed.	503	Methods and Instruments of Research	2	s.h.
	Psych.	560	Advanced Educational Psychology	3	s.h.
	Psych.	660	Seminar in Educational Psychology	2	s.h.
	Psych.	578	Tests and Measurements	3	s.h.
	Psych.	561	Child and Adolescent Development	3	s.h.
	Math.	403	Techniques and Applications of Statistics	2	s.h.
				15	e h

II.	Educational	Found	ations	6	s.h.
	Ed.	406	Educational Sociology	3	s.h.
	Ed.	510	Introduction to Educational Administration	2	s.h.
	Ed.	512	School Community Relations		
	Ed.	530	Curriculum Construction in the Secondary School or	2	s.h.
	Ed.	538	Curriculum Construction in the Elementary School	2	s.h.
	Ed.	533	Philosophy of Education		
	Soc. St.	565	Community Resources and Youth		
	*Ed.	595A	Foundations of Education I		
	*Ed.	595B	Foundations of Education II		
	*Ed.	595C	Structure and Administration of American Schools		
				6	s.h.
III.	Specializatio	n			
	A. Select 4 s.h. from the following:				
	Psych.	564			
			Mentally Handicapped	2	s.h.
	Psych.	565	Psychology and Education of the Socially and		
			Emotionally Handicapped		
	Psych.	572	Teaching the Mentally Handicapped	2	s.h.
				4	s.h.
B. Select 7 s.h. from the following:					
	Ed.	585	Group Guidance and Counseling Activities	2	s.h.
	Psych.	563	Theories of Learning	3	s.h.
	Psych.	573	Physiological Psychology		
	Psych.	566	Psychology and Education of the Gifted		s.h.
	Ed.	552	Principles of Reading Improvement in the Secondar		
			School		
	Psych.	579	Group Tests and Statistical Analysis		
	Ed.	588	Techniques of Interviewing and Counseling		
	Psych.	562	Dynamics of Human Behavior		-
***				7	s.h.
IV. Comprehensive Examination					
Candidates for the Master of Arts Degree are required to pass a con			Master of Arts Degree are required to pass a co	m	pre-

hensive examination, to be taken during the spring term just prior to graduation.

V. A candidate may choose to write a thesis providing he receives the approval of his advisor. Four semester hours credit will be given for the completion of a thesis and the credits will be included in Area III.

# REQUIREMENT FOR CERTIFICATION for N.J. State Certificate as a School Psychologist

A student who holds an M.A. degree in Psychology from Montclair will round out his program to the totals shown below. A student seeking certification (and who is not a candidate for the M.A.) will follow the program outlined below.

## 1. Educational Foundations (Select 12 s.h. from the following:)

Ed.	406	Education Sociology	3	s.h.
Ed.	510	Introduction to Educational Administration	2	s.h.
Ed.	512	School Community Relations	2	s.h.
Ed.	530	Curriculum Construction in the Secondary School or	2	s.h.

<sup>\*</sup>Restricted to those who do not possess a teaching certificate (courses are designed for M.A.T. students)

,				
Ed.	538	Curriculum Construction in the Elementary School 2 s.h.		
Ed.	533	Philosophy of Education 2 s.h.		
Soc. St.		Community Resources and Youth		
*Ed.	595A	Foundations of Education I or II		
or	595B	each		
*Ed.	595C	Structure and Administration of American Schools 3 s.h.		
		12 s.h.		
II. Education of	f the H	landicapped Required 7 s.h.		
Psych.	564	Psychology and Education of the Physically and		
r sych.	204	Mentally Handicapped 2 s.h.		
Psych.	565	Psychology and Education of the Socially and		
1 of en.	202	Emotionally Handicapped 2 s.h.		
Psych.	572	Teaching the Mentally Handicapped 3 s.h.		
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III. Testing and		*		
Math.	403	Techniques and Applications of Statistics		
Ed.	588	Techniques of Interviewing and Counseling 2 s.h.		
Psych.	574	Individual Intelligence Testing		
	575A	Projective Techniques I		
Psych.	575B	Projective Techniques II 3 s.h.		
	576A	Diagnostic Case Studies I		
Psych.	578 661	Tests and Measurements 3 s.h. Practicum in School Psychology 3 s.h.		
Psych. Psych.	662			
rsych.	002	School Psychologist Externship		
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•		havioral Development Required 12 s.h.		
Psych.	561			
Psych.	450			
Psych.	563	Theories of Learning		
Psych.	573	Physiological Psychology		
Psych.	562	Dynamics of Human Behavior 2 s.h.		
Anthrop	ology	elective 12 s.h.		
V. Electives		select courses to balance a program of 60 s.h.		
Ed.	585	Group Guidance Techniques		
Psych.	576B	Diagnostic Case Studies II		
Psych.	566	Psychology and Education of the Gifted 2 s.h.		
Ed.	552	Principles of Reading Improvement in the		
Eu.	332	Secondary School		
Psych.	579	Group Tests and Statistical Analysis 3 s.h.		
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*Other relevant courses listed in the Graduate Catalog (subect to the ap-				

\*Other relevant courses listed in the Graduate Catalog (subect to the approval of the Graduate Advisor.)

## **GRADUATE COURSES**

## Psychology 560. Advanced Educational Psychology

3 s.h.

This course focuses on the learner and the learning process in school situations. The topics include: motivation; acquisition of skills, ideas, and attitudes; technological and other innovations in teaching and learning; and evaluation of teaching-learning. Prerequisite: an introductory course in psychology.

## Psychology 561. Child and Adolescent Development

s.h.

This course reviews the general characteristics of child and adolescent development: motor and physiological, social, emotional, language, intellectual, and interests and ideals. The influ-

ences of home, school, community, and institutional life on child and adolescent development are considered as well as problems of guidance presented by children in the normal course of development and also those presented by deviations from the normal course.

#### Psychology 562. Dynamics of Human Behavior

2 s.h.

In this course consideration is given to the relationships of social forces to mental health. Special emphasis is placed on environmental factors which contribute toward behavioral and learning pathologies. A unit on group dynamics is included.

#### Psychology 563. Theories of Learning

3 s.h.

Reviews for principle phenomena of current learning theory and research and their implications for education. Prerequisite: Two courses in psychology or special permission of the instructor. Some background in biology is recommended,

# Psychology 564. Pyschology and Education of the Physically and Mentally Handicapped 2 s.h.

This course surveys current practices and problems in the education of the children with physical and mental handicaps. It is designed for teachers, counselors, supervisors, and administrators who may work with one or more such children or who may wish to prepare for school and community leadership in developing facilities for such children. Prerequisite: A course in child and/or adolescent psychology.

## Psychology 565. Pyschology and Education of Socially and Emotionally Handicapped

s.h.

This course surveys current practices and problems in the education of socially and emotionally handicapped children. It is designed for teachers, counselors, supervisors, and administrators who may work with one or more such children or may wish to prepare for school and community leadership in developing facilities for such children. Prerequisite: A course in child and/or adolescent psychology.

## Psychology 566. Psychology and Education of the Gifted

2 s.h.

This course is designed to present a complete picture of the bright and gifted young people in contemporary American life. It surveys the various practices involved in their education, as well as the psychological characteristics of this group and socio-emotional development. It is designed for teachers, counselors and administrators, and is conducted on an advanced level, allowing sufficient time for seminar discussions in addition to lectures.

#### Psychology 572. Teaching the Mentally Retarded

3 s.h.

Deals with the total curriculum for educable and trainable children in special classrooms. Emphasizes the development of programs in which such children can acquire basic social, motor, and communication skills. Covers procedures for teaching such skills and provides field visits to special classes.

#### Psychology 573. Physiological Psychology

3 s.h.

An investigation of physiological correlates of behavior with emphasis on the sensory apparatus as well as the major neuro-endocrine integrating relationships as seen in the more complex behaviors, such as emotion, the primary drives, and arousal states. Prerequisites: one course in psychology and biology or by special permission of instructor.

#### Psychology 574. Individual Intelligence Testing

3 s.h.

Considers administration, scoring, and interpretation of individual intelligence tests. Each student is requird to develop competence in the use of the Stanford-Binet Scale and the Wechsler Intelligence Scale for Children. Prerequisite: M.A. matriculant or approved certification candidate in psychology.

#### Psychology 575A. Projective Techniques I

3 s.h.

Presents the basic instruments of projective testing, particularly the Rorschach and Thematic Apperception Tests, both from the standpoint of basic research and of the mechanics of administration and scoring. Prerequisite: M.A. matriculant or approved certification candidate in psychology.

#### 575B. Projective Testing Techniques II

3 s.h.

This course enables the student to move from the theoretical to the practical application of projective tests. Each student is required to administer, score, and analyze individual cases. The major emphasis is on the Rorschach and Thematic. Apperception Tests. Prerequisite: M.A. matriculant or approved certification candidate in psychology.

## Psychology 576A. Diagnostic Case Studies I

3 s.h.

This is the basic course in learning to use diagnostic material and learning to write up diagnostic findings. Students are involved in the understanding of the unique value of various diagnostic tools and the criteria for selection of each in relation to the present school problem.

#### Psychology 576B. Diagnostic Case Studies II

3 s.h.

This course continues along the procedures described in Education 576A. In addition the students are required to present reports on their diagnostic findings of individual cases. Practice in case reporting to schools, parents, teachers, and agencies is undertaken. Prerequisites: M.A. matriculant or approved certification candidate in psychology.

#### Psychology 578. Tests and Measurements

3 s.h.

An introductory survey of the theory, construction, and application of psychological tests. Study of some of the more commonly used tests of intelligence, achievement, aptitude and personality, use and interpretation of tests in a school setting is emphasized.

#### Psychology 579. Group Tests and Statistical Analysis

2 ch

In this course students accumulate test data on elementary and secondary school pupils and learn how to interpret the results to teachers, administrators, and parents. It also covers appropriate statistical analysis from which are drawn conclusions for research and evaluation. Some time will be devoted to the organization and planning of the testing program. Prerequisite: Psychology 578.

## Psychology 660. Seminar in Educational Psychology

2 s.h.

This seminar is designed primarily to provide an opportunity for graduate students in psychology to investigate and apply the techniques of research in the psychology field. Prerequisite: Education 503 and matriculation for M.A. degree in psychology or candidate for certification in psychology.

#### Psychology 661. Practicum in School Psychology

3 s.h.

Provides closely supervised experience by staff personnel in assessment counseling and consultation procedures. Designed to increase competency in psychological techniques required in school settings. Prerequisite: M.A. matriculant or approved certification candidate in psychology.

#### Psychology 662. School Psychologist Externship

3 s.h.

Students are placed in cooperating school districts to serve as apprentice psychologists. A fully certified school psychologist employed in the cooperating district will supervise the student, in addition to the college supervisor will make periodic visits and conduct a series of seminars to be scheduled on campus. Prerequisite: M.A. matriculant or approved certification candidate in psychology.

## SENIOR-GRADUATE COURSES

#### Psychology 450. Psychological Foundations of Personality

2 s.h.

This course is concerned with the physical, mental, and cultural factors influencing personality development. Such topics as the nature of personality, mental health and patterns of deviation, and evaluation are considered.

## Psychology 452. Psychology and Education of the Handicapped

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This course is for the preparation of teachers of handicapped children and youth. It orients prospective teachers of regular classes to the special needs of those with handicaps of sensory, motor, intellectual, emotional, and neurological origns. Both the theoretical psychological aspects and the practical applications to the classroom are studied. The course includes analysis of case materials.

## Psychology 453. Social Psychology

3 s.h.

This course focuses on the social behavior of the individual and the group. Attention is given to social perception, motivation, and learning; attitudes and values; the development and dynamics of social groups; intergroup tension and prejudice; and psychological approaches to public issues.

## Psychology 491. Measurement and Evaluation in Teaching and Learning 3 s.h.

This introductory course deals with teacher-made tests, standardized tests, and other devices for measuring and evaluating achievement, intelligence, aptitudes, social relationships, and personal-social adjustment. Instruction and practice are given in diagnosing disabilities in subject-matter areas, and appraising, marking and reporting pupil progress. The student constructs, uses, and evaluates teacher-made tests, selects and administers standardized tests, handles tests scores, and interprets test data.

## DEPARTMENT OF SCIENCE

Graduate Advisor: DR. JOSEPH F. BECKER

The graduate program of the Science Department is designed to help the science teacher with the problem of maintaining his professional competence with respect to recent advances in the fields of science and science education.

Prior to matriculation in the Science Department for the Master of Arts degree the student should complete a subject matter background of at least twenty-four semester hours of college science. This undergraduate program must show breadth in the three areas of science, biology, chemistry, and physics, plus sufficient depth in at least one area to serve as a base for the graduate program to be taken in the major area.

In cases where there is a weak undergraduate program in the major field, prerequisite courses, not for graduate credit, may be assigned. In general, the assignment of elective hours to the major area would compensate for deficiencies in depth of preparation while prerequisite courses would compensate for deficiencies in breadth.

The student's work program is prepared in cooperation with the science advisor. Any changes in the student's work program are made only with the written approval of the science advisor.

## REQUIREMENTS FOR THE M.A. DEGREE IN SCIENCE

- I. General Education (see Master's Degree Program Pattern) 6-12 s.h.
- II. Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h.
- III. Specialization 11-20 s.h.
  - A. The candidate must complete the research requirement by one of the two procedures listed below:

Sci. 505. Research Seminar in Science 2 s.h. Grad. 600. Master's Thesis (see *Thesis*, p. 28) 4 s.h.

B. The candidate must complete at least 2 four-semester hour courses from among the following:

Bio. 407, 408, 409, 410, 411, 415, 422, 424, 425, 506, 512, 520, 530, 531, 540.

Chem. 407, 408, 411, 412, 415, 509, 510, 515.

Phy. 402, 405, 406, 409, 410, 411, 415, 416, 417, 512, 515, 520.

Sci. 405, 421.

Earth Sci. 406, 408, 430-431.

C. The candidate may elect not more than three semester hours from among the following:

Bio. 501, Chem. 501, Phy. 501.

D. The candidate may elect not more than six semester-hours from among the following:

Bio. 412, 413, 414, 417, 418, 516.

Chem. 413, 414, 511.

Phy. 513.

Earth Sci. 404, 440.

Sci. 409, 410, 411, 412, 413, 414, 415, 418, 419, 420, 422.

Minimum: 32 s.h.

## IV. Comprehensive Examination

The comprehensive examination will be based upon the research report in Science 505 or the Master's Thesis.

#### GRADUATE COURSES IN BIOLOGY

#### Biology 501. The Teaching of Biology in Secondary Schools

3 s.h.

This is a seminar and research course designed to give opportunity for study of the best methods and practices being used in the teaching of secondary school biology. Major topics of discussion are: aims of secondary school biology, course content, functions of textbooks, testing, laboratory exercises and demonstrations, and the collection and use of suitable and available laboratory materials. A study is made of recent research studies in the field of biology teaching. Prerequisite: 16 s.h. in biology.

#### Biology 506. Histology and Histological Techniques

4 s.h.

This course includes a study of the microscopic anatomy of living forms in order to bring about the fuller appreciations of their structure and function. The structural characteristics of cells and their specialization according to function are considered as well as the organization of this basic unit into the tissues and organs of the intact form.

The study of histological preparations during the laboratory period gives the student an opportunity to learn the characteristics of each tissue and organ. Basic procedures for the preparation of tissue sections and permanent mounts are covered. Prerequisite: 8 s.h. in biology.

#### Biology 512. General Ecology

4 s.h.

This course considers basic ecological principles and concepts. The habitat approach is followed with appropriate field exercises in fresh water, marine and terrestrial ecology. Intra and interspecific relationships are stressed with all living members of the ecosystem. Practical applications of quantitative and qualitative methods will be stressed. Radioecology will be explored. In every case the role of man in relation to his environment will be central. Each student will choose a problem in either plant or animal ecology and do appropriate research in field and library and report on such activity. Prerequisites: General botany, general zoology, plant taxonomy or equivalent, some physical science.

#### Biology 516. Evolution

2 s.h.

Theories of biological variation, race, and species formation. The development of some of the major animal and plant groups in time and space. Prerequisite: Zoology and/or botany.

#### Biology 520. Plant Physiology

4 s.h.

This course is designed to provide the students with an investigation into the physiology of plants. It will cover in depth those areas of plant growth, development, and reproduction covered generally in the introductory course as well as the new advances in plant physiology. Some of the topics included are water relations of plants, mineral nutrition, physiological significance of soils and soil moisture, photosynthesis, respiration, plant biosynthesis, and dynamics of growth. Prerequisites: Organic chemistry, general botany, or special permission of the instructor.

#### Biology 530. Animal Behavior

4 s.h.

How animals adjust and adapt to stimuli in their external and internal environment, the neuro-muscular and hormonal mechanisms involved, their ontogeny and phylogeny. Prerequisites: A year course in invertebrate and vertebrate zoology and an introductory course in general psychology.

#### Biology 531. Comparative Human Anatomy

4 s.h.

A study of man's physical, physiological, and behavioral aspects in the framework, and by the methodological approach of, comparative anatomy. Prerequisite: A year course in general zoology and a course in human anatomy and physiology.

#### Biology 540. Parasitology

4 s.h.

This course will consider the structure, life cycles, and ecology of medically important protozoans, helminths, and arthropods. Major emphasis will be placed on the biological relationships between parasite vector and human host. Laboratory work will consist of identification with the use of keys, dissection, examination and preparation of appropriate collections and slides. Prerequisite: General zoology.

#### SENIOR-GRADUATE IN BIOLOGY

#### Biology 407. Comparative Vertebrate Embryology

4 s.h.

A broad study of developmental anatomy is made with work on fish, amphibian, reptilian, bird and mammalian embryos. The student makes slides of chick embryos.

A modern experimental approach to embryology is reviewed, and implications of a genetic nature are explored. Prerequisite: 8 s.h. of work in zoology.

## Biology 408. Biological Science Demonstration

4 s.h.

The opportunity is given to gain experience in the use of equipment, supplies, and teaching aids so essential to the operation of a successful laboratory and class. Emphasis is also placed upon the collecting and preserving of plant and animal material. The laboratory is devoted to the working out of individual and group experiments and demonstrations. A considerable library of techniques is developed. Prerequisite: 8 s.h. in zoology and 4 s.h. in botany.

#### Biology 409. Human Physiology

4 s.h.

A study is made of both cellular and general aspects of human physiology based upon a previous study of mammalian anatomy and histology. Laboratory sessions closely coincide with concepts discussed during lecture sessions. Prerequisite: A course in vertebrate anatomy or Biology 402.

## Biology 410. Comparative Anatomy of the Vertebrata

4 s.h.

Representative members of the phylum chordata are studied by means of dissections and demonstrations. The prochordata are considered briefly. Fundamental principles of taxonomy, anatomy, physiology, and ecology are reviewed and amplified. This course should enrich the background of those interested in vertebrate forms and be of value for those interested in man and his place in the world. Prerequisite: 8 s.h. of work in zoology.

## Biology 411. Microbiology

4 s.h.

General biological phenomena are demonstrated by microbial life by means of laboratory experimentation with bacteria and other microorganisms. Major topics include: history of microbiology, classification, morphology, metabolism, and ecology. Emphasis is placed upon the economic importance and the relationship of microorganisms to human welfare, health, and disease. Specific laboratory techniques and procedures are developed in the course. Prerequisites: General botany, general zoology, and inorganic and organic chemistry.

#### Biology 412. Genetics

2 s.h.

The basic facts, principles, and theories of variation and heredity as illustrated in microorganisms, higher plants, animals, and man are considered. Modern cytological, embryological, developmental, and statistical approaches are developed. The newer concepts of the gene, mutation, and gene action are considered. Practical exercises are used to illustrate the principles. Prerequisite: Elementary biology of collegiate grade and or permission of the instructor.

#### Biology 413. Economic Botany

2 s.h.

The consideration of the importance of plants and plant life to the world in general and to man in particular is the principal aim of this course. The economic importance of bacteria, fungi, and other lower plants is considered, as well as that of the seed plants.

#### Biology 414. Field Ornithology

2 s.h.

New Jersey is one of the best areas in the East for the study of birds. On the Montclair campus alone, over 130 species have been observed. This course deals primarily with the identification and natural history of birds. A variety of habitats are visited so that one may become acquainted with the habits and requirements of this unusually well-adapted vertebrate type. Migration, methods of attracting and protecting birds, the value of birds, and related topics are also considered. Prerequisite: A year of biology or the equivalent.

#### Biology 417, 418. Modern Biology I and II

4 s.h. each

This course meets the needs of in-service teachers who require training in the new approaches to biological knowledge. Cellular biology, biochemistry, evolution and genetics, and the plant and animal community comprise the five general areas to be stressed. Specialists present the data and indicate the implications for man. Visiting lectures and field trips contribute to the experiences of the students. All participants must be in-service biology teachers in a secondary school.

## Biology 422. Field Studies of Flowering Plants

4 s.h.

The emphasis of this course is placed upon the methods of identification of higher plants and the ecological factors affecting the growth and development of these plants. Plants in their winter conditions are considered first. As the season progresses, the emphasis changes from the identification of woody to herbaceous forms. Plant communities of various types are observed, and the factors influencing their development are discussed. Field trips are taken to such typical habitats as the Pine Barrens, and Troy Meadows. Prerequisite: General botany.

#### Biology 424. Morphology of Flowering Plants

4 s.h.

This will be an examination of the structure of flowering plants with greatest emphasis being placed upon variation in floral morphology. Adaptations, family relationships, evolutionary development, and some taxonomy will be considered also. Prerequisite: General botany.

#### Biology 425. Elementary Plant Physiology

4 s.h.

This introductory course will consider the major physiological processes of the flowering plant. Topics surveyed in this course include growth, metabolism, photosynthesis, respiration, water relations, and mineral nutrition. Prerequisites: General botany and organic chemistry.

#### GRADUATE COURSES IN CHEMISTRY

#### Chemistry 501. The Teaching of Chemistry in Secondary Schools

3 s.h.

A study is made of the objectives, recent trends, methods of presentation, courses of study, lesson planning, instructional aids, and subject matter of high school chemistry. Prerequisite: 16 s.h. in chemistry.

#### Chemistry 509. Advanced Inorganic Chemistry

4 s.h.

This course offers opportunity for intensive and systematic study of the elements in the light of the periodic classification. Selected theories and principles of inorganic chemistry and some of their applications are studied in detail. A study is made of types of compounds. Directed use of chemical literature is an important part of this course. Individual experimental work in the laboratory consists chiefly of preparation and purification of inorganic compounds and testing for impurities in the products. Prerequisite: General college chemistry.

#### Chemistry 510. Food Inspection and Analysis

4 s.h.

A study is made of the composition of commercial food products, the laws governing purity and marketing of foods, methods of analysis of food. Laboratory work is an extension of chemical and microscopic analysis to provide application of various analytical methods. Methods of extraction; detection of adulterants, preservatives, coloring; estimation of carbohydrates, fats, proteins, minerals, and vitamins are included in the laboratory work of the course. Prerequisites: Organic chemistry and quantitative analysis.

#### Chemistry 511. Advanced Biochemistry

2 s.h.

This course is designed to provide a continuum with the course Chemistry 508, Biochemistry. The more recent advances in biochemistry are studied. The course attempts to integrate the concepts of intermediate metabolism. Some of the topics included are: metabolism of biological compounds, electron transport and oxidative phosphorylation, integration of carbohydrate, lipid, and protein metabolism, photosynthesis, the nitrogen cycle, and biochemical genetics. Prerequisites: General college chemistry; organic chemistry; Chemistry 508, biochemistry, or equivalent; or special permission of the instructor.

#### Chemistry 515. Advanced Organic Chemistry: Qualitative Organic Analysis

4 s.h.

The primary aim of this course is to acquaint the student with the methods of identification of unknown organic substances. The value, and difference between this and many other laboratory courses, is that as yet no scheme has been devised which reduces the course to the mere following of directions. At every step in the analysis, the student is required to exercise his own judgment. He must rely on his own faculties for observation and originality in planning his work in order to attain a complete and successful characterization of an unknown organic compound. Prerequisite: Organic chemistry.

#### SENIOR-GRADUATE COURSES IN CHEMISTRY

#### Chemistry 407. Advanced Quantitative Analysis

4 s.h.

This course is adapted to the needs of students. The student, after consultation with the instructor, may select analyses from the following: general or special types of oxidation-

reduction; gravimetric methods; colormetric methods; use of organic reagents in analyses; electrometric titrations, conductimetric titrations; spectographic methods of analysis; electrodeposition of metals; and special methods of analysis. Prerequisites: General college physics and one semester of quantitative analysis, or permission of the instructor.

#### Chemistry 408A. Industrial Chemistry, Part I

2 s.h.

The purpose is to enable science teachers to understand the type of chemical industries in the State of New Jersey and the nature of their problems. A survey is made by lectures, reports, and trips to plants of the chemical industries. This section of the course stresses the importance and the characteristics of chemical industry, the various unit operations used by the industry to carry out chemical reactions, the controls used to insure quality, the organization for research, and the type of workers employed. Prerequisites: General and organic chemistry, or permission of the instructor.

## Chemistry 408B. Industrial Chemistry, Part II

2 s.h.

This course is a study of the chemical industries of the metropolitan area utilizing the methods outlined in Chemistry 408A. Also, a study is made of the economics of chemical industry, chemistry, and industry in general, and the effects of chemical discoveries upon living conditions. Prerequisites: General and organic chemistry, or permission of the instructor.

## Chemistry 411. Physical Chemistry, Part I

This course, the first half of a year's work in physical chemistry, deals with gases, liquids, crystals, physical properties and electrolytes, colloids, thermo-chemistry, and homogeneous and heterogeneous equilibria. Prerequisites: General college chemistry, analytical chemistry, and general college physics.

#### Chemistry 412. Physical Chemistry, Part II

4 s.h.

This course deals with electrical conductance, electrolytic equilibrium, electromotive force, electrolysis, polarization, chemical kinetics, photochemical reactions, atomic structure, and radioactivity. Prerequisites: General college chemistry, analytical chemistry, and general college physics.

#### Chemistry 413. Atomic Structure and Atomic Energy

2 s.h.

This is a course designed to familiarize the student with a modern conception of the structure of matter and to acquaint him with some significant aspects of atomic energy. Some of the topics: discoveries leading to knowledge of the structure of the atom; isotopes; nuclear fission; nuclear reactions; radio-active isotopes in agricultural, biological, and chemical research; and availability of materials. Prerequisites: General college chemistry and general college physics, or special permission of the instructor.

#### Chemistry 414. Introduction to Radiochemistry

2 s.h.

This course is an introduction to the use of radioisotope experiments for the chemistry curriculum. The course consists of lecture and laboratory work which covers such topics as detection instruments, counting techniques, sample preparation, radiochemical separations by co-precipitation, chelation, and ion-exchange techniques. Prerequisites: General college chemistry, general college physics, or permission of the instructor.

#### Chemistry 415. Biochemistry

In this course a study is made of the composition of living organisms, their nutritional requirements, their mechanism for promoting and regulating chemical action, and their metabolism of foods. A laboratory study is made of the components of foods, enzyme action, isolation of proteins, etc., blood and urine analysis. Prerequisite: Organic chemistry.

## GRADUATE COURSES IN PHYSICS

#### Physics 501. The Teaching of Physics in Secondary Schools

A study is made of the objectives, methods, and techniques of presentation, courses of study, lesson planning, instructional aids, and subject matter of high-school physics. Attention is given to the recent trends in developing apparatus and other equipment suitable for teaching the principles of physics. Assignments are made from recent literature on the outcomes of teaching of physics by television and by other visual aids. Prerequisite: 16 s.h. in physics.

#### Physics 512. Modern Physics

4 s.h.

This course is a survey of recent experimental research in physics and of the newer theories concerning nuclear physics and electricity. Such topics as atomic spectra, radio-activity, artificial transmutation of the elements, and cosmic rays are discussed. Prerequisites: General college physics, general college chemistry, and a course in electrical measurements. (No credit is given for Phy. 512 if student has taken Phy. 415.)

## Physics 513. Nuclear Radiation

2 s.h.

A study of the nature of radiations is made. Particular attention is given to radiation measurement technique. The course is concluded with a study of health physics as related to radiation dosages and their effects. Some attention is paid to disposal of radioactive wastes, radiation protection, and safety precautions. Prerequisites: General college physics, general college chemistry, and a course in electrical measurements.

#### Physics 515. Fields and Waves

4 s.h.

Intended as a terminal course in physics. Portions of all the undergraduate and graduate courses are utilized to present an overall view of the "state of the art." The philosophy and most advanced research in modern day physics are combined to present a unified view of the physicist's present interpretation of the world about us. Prerequisites: Modern Physics. Introduction to Analytical Mechanics, Nuclear Physics, and a year of Integral and Differential Calculus.

#### Physics 520. Selected Topics in Physics

4 s.h.

This course is designed to acquaint physical science teachers with recent developments in physics. Topics considered will vary. Illustrative examples are: Mossbauer effect, lasers and masers, nuclear and electron resonance, topics from astro-physics, low and high temperature physics. Laboratory work is not required. Prerequisites: Phy. 101, 102, 402.

## SENIOR-GRADUATE COURSES IN PHYSICS

#### Physics 402. Magnetism and Electricity

4 s.h.

The purposes of the course are: (1) to provide a background of training in the fundamental laws and principles governing the generation and use of electricity; (2) to develop skill in manipulating laboratory and demonstration apparatus; and (3) to learn the basic principles of alternating current circuits.

Laboratory experiments with modern electrical instruments are employed to verify the Maxwell equations. Some of the topics studied are: modern concepts of the electronic structure of matter, electrical forces, magnetic fields, potential, resistance, impedance, capacitance, and time constants. Prerequisite: General college physics.

#### Physics 405. Light and Optical Instruments

4 s.h.

Topics included for study in the classroom and laboratory are: the propagation of light; emission and absorption of radiant energy; reflection, refraction, polarization; spectrum analysis; photometric measurements; photoelectric cells; measurement of high temperatures; characteristics of illumination, modern illuminants; and industrial and domestic uses of light. Prerequisites: General college physics and a course in electrical measurements.

#### Physics 406. Astronomy

4 s.h.

This course is designed to acquaint the student with the celestial sphere, celestial motions, and the phenomena associated therewith; to make him aware of the principles of astronomy. It consists of a survey of the solar system, practical problems in locating and identifying celestial bodies, a consideration of light and matter, the basic laws of motion, the physical-chemical properties of the sun and stars, stellar scales and maps, the measurement of distance, cosmology of the universe, the history of astronomical concepts, and the regularities, irregularities, and evolution of the solar system. Prerequisites: General college physics and chemistry.

#### Physics 409. Basic Electronics

4 s.h.

An introductory course in basic electronic phenomena covering such topics as elementary circuit theory, electron emission, vacuum tube and transistor characteristics, non-linear circuit elements, gaseous discharge, and the use of transistors. Applications of electronics to instrumentation, servo-mechanisms, radio, and television are introduced. Prerequisites: General college physics, and a course in magnetism and electricity.

#### Physics 410. Meteorology

4 s.h.

This course develops a fuller appreciation of our atmosphere with emphasis on meteorological applications of physical principles. Consideration is given to weather elements; temperature effects; air currents, air masses, and fronts; the collection, dissemination, and interpretation of weather data; and the general applications of meterology. The student is expected to learn to use meterological instrumentation, and emphasis is placed upon the improvisation of apparatus and equipment. Prerequisite: General college physics.

## Physics 411. Photography

4 s.h.

This course consists of laboratory work and field work supplemented by lectures and demonstrations. Emphasis is placed on physical principles in the construction of cameras, projection printers, tanks and filters. Special attention is given to chemical principles in the development of films and paper, toning, intensification, and reduction. Prerequisites: General college physics and general college chemistry or permission of the instructor.

#### Physics 415. Introduction to Modern Physics

4 s.h.

This course is designed to give the student a general view of the important advances in physics during the past fifty years. In the first part of the course considerable time is spent in the study of electron theory. Some of the topics considered are: the hydrogen atom, optical and X-ray spectra, natural radio-activity, cosmic ray, nuclear fission, new elements and isotopes, and particle accelerators. Some laboratory work is required. Prerequisites: General college physics, general college chemistry, and a course in electrical measurements.

#### Physics 416. Introduction to Analytic Mechanics

4 s.h.

This course includes some treatment of the physics of classical mechanics, of the kinematics of dynamics of particles, and the dynamics of rigid bodies. Mathematical methods of handling data and theory are introduced and developed. The course consists of lectures, discussions, demonstrations of practical application, and problem solving. There are two hours of lecture-recitation and four hours of laboratory work per week. Prerequisite: General college physics. Recommended: 1 year of calculus.

#### Physics 417. Nuclear Physics

4 s.h.

Nuclear Physics is a one-semester course, including laboratory work, which is designed to provide a foundation in the area of nuclear physics for physical science majors and minors. Some topics considered in the course: static properties of nuclei, detectors, nuclear reactions, forces and models. Frerequisites: Phys. 101, 102, 402.

#### Physics 420. Heat and Thermodynamics

3 s.h.

This is a one-semester course without laboratory, designed to provide a knowledge of the area of heat and thermodynamics. Some topics considered are: thermodynamics systems, laws of thermodynamics, entropy, kinetic theory, transport processes, statistical thermodynamics.

#### Physics 431. Theoretical Physics I, Advanced Mechanics

3 s.h.

In this one semester course without laboratory, students will consider topics in mechanics on an advanced level from that discussed in Physics 416. Analytical Mechanics. Some topics considered are: transformations, oscillations, including the anharmonic oscillator, generalized equations of motion. Lagrange's Equations, Hamilton's equations, theory of small oscillations, wave propagation, Green's function.

#### Physics 432. Theoretical Physics II, Advanced Electricity and Magnetism 3 s.h.

In this one semester course without laboratory, the student is given an opportunity to consider the topics in electricity and magnetism on an advanced level from those discussed in Physics 402 Electricity and Magnetism. Some of the topics discussed are: dielectric flux, A.C. networks, nonsinusoidal A.C., transients and pulses, electromagnetic radiation.

#### SENIOR-GRADUATE COURSES IN EARTH SCIENCE

NOTE: Previous course numbers are enclosed in parentheses. Students are not permitted to enroll in courses they have taken previously under other titles and/or course numbers.

## Earth Sci. 404. (Geo. 426) Historical Geology

3 s.h.

This course is designed to aid the prospective teacher in acquiring an understanding of the systematic evolution of the present landscape, from the local area to the entire North American continent. Other purposes are to establish the concepts of vast periods of time, of the development of life, of great mountain-making movements, and of the return of all to the sea.

## Earth Sci. 406. (Sci. 450) Paleontology

4 s.h.

A study of the classification, relationships, and evolutionary history of fossils. Study is made of the fossils in the relationship to their ecological environment. Prerequisite: Geology.

#### Earth Sci. 408. (Sci. 455) Mineralogy

4 s.h.

An introduction to the study of minerals; their morphology, internal structure, origin, occurrence, and properties. Study will be made of the mineral resources of the New Jersey area. Prerequisites: Geology, general chemistry.

## Earth Sci. 430, 431 (Sci. 451, 452) Oceanography and Limnology I, II

A study of the principles and techniques used in the study of both fresh and salt water bodies. Both physical and biological processes within the water bodies are considered. Field work will be done on local bodies of water. Prerequisites: Geology, general chemistry.

## Earth Sci. 440. (Geo. 407) Advanced Cartography

3 s.h.

The emphasis in this course is on modern methods employed in cartographic laboratories, in government, academic institutions, and commerical organizations. The course is designed for students with a background in cartography gained either as a result of experience or through completion of an introductory college cartography course. Prerequisite: Earth Sci. 340 or equivalent.

#### **General Education Courses in Science**

The following courses may be chosen by matriculated students (other than Science majors) to meet the requirements in General Education outside their specific area of specialization:

# Bio. 413. Economic Botany, Sci. 418. Three Centuries of Science Progress, Sci. 422. Consumer Science.

Substitutions may be made on recommendation of the Science Department from the list of courses offered by the department.

#### **GRADUATE COURSES IN SCIENCE**

## Science 505. Research Seminar in Science

2 s.h.

This course is designed to afford opportunity for graduate students in science, supervisors, and science teachers: (1) to investigate research in science education; (2) to organize science experiences and science information with the teaching materials for the public schools. Each member of the group selects a project. This project must be presented to the science faculty and graduate students for evaluation. Prerequisites: Matriculation for M.A. degree in science, concurrent registration Educ. 503, or permission of the instructor.

## SENIOR-GRADUATE COURSES IN SCIENCE

## Science 405. Field and Laboratory Studies in Science

A ch

This integrated course is designed to show the relationship in the geological rock formations, the types of soil, water patterns, plant communities, and animal inhabitants in northern New Jersey, and the effects on human occupations. The field trips are for the purpose of gathering data and materials for intensive work in the laboratory. The experiments are designed to give the student acquaintance with the science of common but possibly unstudied features of the landscape; e.g., soils are reproduced in profile and examined microscopically, physically, and chemically; water from a variety of sources is tested for biological and chemical impurities; the census of plant and animal inhabitants of typical areas is associated with relevant factors in the environment. Discussions precede and follow the field and laboratory work to establish the probable history of the area and to suggest the probable trend, whether advancing or retrogressing, of its development. Stress is placed on the kinds of human control in specific communities which would best serve their progress.

Students are asked to submit an analysis of the geological and biological features of some known community, based on the skills and principles learned. Some other objectives of the course include an understanding of the organization of school museums for learning purposes, the making of ecological maps and the illustration of them with photographs and diagrams, and the techniques of ecological field trips. Two instructors, a chemist and a biologist, collaborate in giving this course. Prerequisite: Proficiency in biology and chemistry.

#### Science 409. Senior-High-School Physical Science Demonstrations

This course furnishes teachers of the physical sciences with demonstrations and experiments designed for work in high-school chemistry, physics, and applied physical science courses. A detailed study of demonstrations is made with emphasis on visibility and avoidance of failure. Emphasis is placed on sources of new demonstrations.

#### Science 410. Junior-High-School Science Demonstrations

4 s.h.

2 s.h.

This course covers the methods of experimental instruction appropriate to grades seven, eight, and nine. A detailed study is made of demonstrations for general science at their levels.

#### Science 411. Problems in Field Studies in Science

2 s.h.

In this course each student selects a phase of field science in which he does advanced research under the guidance of the instructor. Plant ecology, bird-life, pond life, fungi, tree diseases, and insect life are a few of the areas from which the student may choose. Prerequisites: Science 412, Field Studies in Science, or its equivalent, plus at least 12 s.h. of biology.

#### Science 412. Field Studies in Science: Biological

2 s.h.

Extensive instruction in the identification and natural history of fauna and flora is given in this course. Students examine the ecology of plant and animal communities (terrestrial and aquatic) and relate such communities with man's use of natural resources. The relation of field activities to present school curricula is considered. No previous science courses are required.

#### Science 413. Field Studies in Science: Physical

2 s.h.

Emphasis in this course is given to local and New Jersey geology, minerals, soils, and waters, with emphasis on the chemical and physical aspects of soil and water. Field trips are taken through the Kittatinny Mountains and to the Delaware Water Gap.

#### Science 414. Conservation of Plants and Animals

2 s.h.

The social, economic, and ecological implications of plant and animal conservation are considered together in this course. Discussion periods are interspersed with field trips to forest and wildlife management areas. Cooperating experts from state and federal agencies bring special contributions in their fields. Visual aids are used extensively.

#### Science 415. Conservation of Soil and Water

2 s.h.

The social, economic, and ecological implications of soil and water conservation are considered together in this course. Discussion periods are interspersed with field trips to selected areas. Outside experts bring special contributions in their fields. Visual aids are used extensively.

#### Science 418. Three Centuries of Science Progress

2 s.h.

This course includes a study of fundamental world changes that have resulted in the past three hundred years from scientific discoveries. Topics considered are the following: a background of the beliefs and practices of the age; the processes of thought which produced skepticism; the experiments devised to disprove ruling opinions; the new concepts arising from fresh evidence; and the social, economic, and philosophic adjustments following the discoveries.

Stress is given to the nature of scientific inquiry, its cumulative nature, its desire for freedom, and how to judge the probable fruitfulness of a research problem. The role the man of science occupies in the world today is contrasted with his counterpart in earlier centuries. Demonstrations of historical experiments, readings in the original literature, and discussions are employed.

#### Science 419. Field Science and Conservation

2 s.h.

In this course students study phases of field science which are related to conservation. The components of soil and water which produce good crops are studied. Students gain an understanding of farm practices by visiting several nearby farms. Forest and wood-lot management, wildlife preservation, mineral resources use, and other important areas in which science influences the conservation of natural resources are investigated.

#### Science 420. Water Supply and Conservation Problems

2 s.h.

This course is designed to provide students with an opportunity to do an extensive study of the water supply problems in New Jersey and surrounding states. A study of water tables, rainfall, irrigation, drainage, flooding, watershed management, stream pollution, and soil erosion gives students a background for understanding the problems involved in domestic and industrial use of water. State and regional water conservation projects such as Incodel, Passaic Valley Flood Control, and Stony Brook Water-shed are studied. Teaching materials are supplied, and methods of presenting this material to elementary and secondary pupils are demonstrated and discussed.

#### Science 422. Consumer Science

2 s.h.

The purpose and organization of this course are to acquaint the consumer with the aspects of science in everyday life. Basic scientific principles are developed in the process of testing and evaluating consumer products. Field trips are taken to local industries and public utilities to evaluate processes as well as products. A laboratory testing program deals with commercial products from household appliances to foodstuffs and fertilizers. A testing and instructional program is also developed with a local industry. The course is included as a general education offering at the graduate level and is not intended as a course for majors in this department.

## DEPARTMENT OF SOCIAL SCIENCES

Graduate Advisor: Dr. BERTHA QUINTANA

The teacher of social studies works in a field the boundaries of which are constantly changing and expanding. The necessity for constant study, especially with regard to the contemporary social situation and its problems, presses upon every secondary school teacher of the social studies. The Social Sciences Department at Montclair intends to provide for such teachers courses of an advanced character which will help to keep them abreast of the changes in a changing society and a complex world. It also provides advanced courses for those teachers who wish to increase their preparedness in specialized secondary school subjects. Finally, it aims to provide for the teacher-in-service an opportunity for keeping informed concerning the changing techniques and problems of teaching the social studies. Selections from advanced courses of the sort just described lead to the Master's degree in the social studies.

#### REQUIREMENTS FOR M.A. DEGREE IN SOCIAL SCIENCES

In addition to the general requirements for admission to the graduate program at Montclair, a candidate for the degree of Master of Arts in Social Sciences must present an undergraduate major in social sciences of at least twenty-four semester hours.

I. General Education (see Master's Degree Program Pattern)

6-12 s.h.

- II. Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h.
- III. Specialization

11-20 s.h.

- A. To increase the candidate's competence as a teacher, each student will take a minimum of eleven and a maximum of twenty semester hours in courses offered by the Social Sciences Department. It is recommended that students develop a concentration by electing at least half of their specialization requirement in one of the following areas of study associated with the social studies:
  - 1. American History
  - 2. European History
  - 3. Anthropology
  - 4. Economics
  - 5. Geography
  - 6. Political Science
  - 7. Sociology
  - 8. Non-Western Culture
  - 9. Curriculum

At times two or more of these areas may be combined to make up such a concentration. The balance of the student's program will be made up of electives in other areas and related major fields.

## B. Research Requirement

- One course in each of the areas of concentration will be required
  of those electing to do their research project in that area. This course
  will emphasize the research methodology peculiar to its specific fields
  of inquiry.
- In addition to the research course (Educ. 503) required of candidates in all departments, those majoring in Social Studies will take Social Studies 603: Seminar in Social Studies Research.

## IV. Comprehensive Examination

All candidates will take part in a final integrative experience consisting of a three hour written examination structured to cover:

- 1. Subject of research project
- 2. Selected area of concentration
- 3. Current trends in social education

Minimum: 32 s.h.

## GRADUATE COURSES IN SOCIAL SCIENCES

## Social Studies 501. Modern Social Studies Instruction and Supervision 2 s.h.

This course is designed to assist teachers, administrators, and supervisors to obtain a comprehensive view of recent curriculum trends in social studies. While primary emphasis will be on development in the secondary school, this aspect will be considered in relation to the total K through 12 program. Consideration will also be given to the problems of administration and supervision as they relate to the pupil, teacher, administrator, and supervisor.

#### Social Studies 502. New Materials for the Social Studies

2 s.h.

A study of the sources, selection and evaluation of new materials for the improvements of social studies instruction form the major part of this course. Teachers and administrators concerned with the development of effective social studies programs can become acquainted with the very latest material and equipment available.

## Social Studies 503. The Study of Religion

3 s.h.

This course is designed to introduce teachers, supervisors and administrators to the study of religion. Efforts are directed towards the development of an understanding of the world's major religions as interpreted through history, the various social sciences, literature and the arts.

#### Social Studies 601A, 601B, 601C. New Interpretations in History

Designed for the teacher with a special interest in history, the course examines important reappraisals of the great problems, personalities and periods of either (A) American history, (B) European history, (C) Non-Western history in the light of recent representative examples of historical writing and research.

#### Social Studies 602A, 602B. Recent Trends in the Social Sciences 2 s.h.

The teacher with a special interest in the social sciences can utilize this course to examine current trends in the fields of (A) anthropology and sociology, or (B) political science and economics in terms of recent representative examples of professional writing and research.

#### Social Studies 603. Social Studies Research Seminar

2 s.h.

This seminar course is designed primarily to provide an opportunity for graduate students in the social sciences to investigate and apply the techniques of research in the social studies field. Prerequisite: Educ. 503.

#### Anthropology 531. Living Races

2 s.h.

The physical anthropology of race: human origins; racial revolution; and racial types in the modern world. The facts of race are utilized as the basis for studying race relations in contemporary society, as well as for clarifying misconceptions concerning face and intelligence, race and culture.

#### Anthropology 532. Applied Anthropology

2 s.h.

This course considers the selection and application of anthropological data for dealing with problems of contemporary life. Emphasis is placed on anthropological method, early problems of application, and the relevance today of anthropological knowledge in the professions. Prerequisite: Anthropology 401 or 402. Required for Anthropology concentration.

## Anthropology 533. Spanish Culture in the U.S. Today

2 s.h.

This course deals with the cultural heritage of Spanish-speaking America. Utilizing anthropological concepts, problems of adjustment and educational implications are emphasized.

## Anthropology 534. Anthropology and Education

2 s.h.

An advanced seminar dealing with the relationship of anthropology to education. Group work and guided individual research centering on the use of anthropological data in our schools. Prerequisites: 6 credits in anthropology, or by permission of the instructor.

## Economics 541. Foundations of Contemporary Economic Thought 2 s.h

The objectives of this course are: (1) to study the antecedents of current economic theory; (2) to analyze economics as a cumulative science through examination of the works of the creative economists; (3) to foster an understanding of the uses and limitations of economic theory.

## Economics 542. Economic Stability

2 s.h.

The objectives of this course are: (1) to study the determinants of stability and growth; (2) to analyze policies available to develop and developing nations that deal with instability and stagnation; (3) to foster an understanding of the issues involved in efforts to avoid insecurity and promote economic growth.

#### Economics 543. U.S. in the World Economy

2 s.h.

The objectives of this course are: (1) to study the theory and institutions of American foreign trade; (2) to analyze the alternatives available to the American people; (3) to foster an understanding of the problem of American foreign economic policies.

#### Economics 544. Government and Business

2 s.h.

The objectives of this course are: (1) to study the evolution of governmental influences on the functioning of the American economy; (2) to analyze the causes and consequences of government regulation and control; (3) to foster an understanding of the relationship between economic analysis and public policies.

## History 511. American Colonial History, 1492-1776

2 s.h.

A study of European colonial activity in the New World with particular emphasis on the areas which now constitute the United States. Political, social, economic, and intellectual developments receive attention.

## History 513. The American Revolution and the Early Republic, 1763-1828 2 s.h.

Study and analysis of the causes and events of the Revolution, the establishment and growth of domestic institutions under the Constitution, and the development of foreign policy.

#### History 514. The Middle Period in American History, 1828-1876

A study of the significant events and developments of this period of our history, including attention to Jacksonian democracy, westward expansion, sectionalism, the Civil War, and Reconstruction.

#### History 515. America in Transition, 1865-1917

2 s.h.

A study of the forces which contributed to the development of the modern industrialized America, the changing nature of American society, and the reactions to the changes which took place in the period.

#### History 516. Recent American History, 1914 to the Present

2 s.h.

Main emphasis will be on the continuing reactions to the problems of an industrialized America, and on America's activities and role as a world power. The period studied is from c. 1914 to the present. The seminar method is used and attention is given to the techniques of historical research and historical writing as it applies to the later period in American history.

#### History 523. Modern France

2 s.h.

This course studies the development of modern France from 1789 to the present. Emphasis is placed upon political, social, and economic conditions and trends from the Revolution and Napoleon through the Restoration, Second Empire, Third and Fourth Republics to the establishment in 1958 of the Fifth Republic by Charles de Gaulle.

#### History 524. Contemporary Europe

2 s.h.

The period between the wars (1919-39) is reviewed, and analyses are made of the origins of World War II and the peace settlement of 1945-47. Emphasis is then placed upon developments in the postwar period, including the reconstruction of Germany, the changeover in France from the Fourth to the Fifth Republic, Britain's continuing economic crisis, and problems of the states of eastern Europe. Special consideration is given to the movement for political and economic integration of European states.

## History 525. Russia in the Modern World

2 s.h.

Particular attention is devoted to the institutional apparatus of the Soviet system with emphasis given to the special functions performed by such agencies as the press, the schools, and the agricultural collective. The role of the Communist Party and its relation to other political and economic forces within the nation are discussed. In appraising the development of Soviet foreign policy, the emergence of Soviet interests in the Far East, the Middle East, and Africa are considered.

## History 526. Russia Before the Revolution

2 s.h.

An examination is made of the forces which have shaped the course of Russian history. Groups, institutions unique to the Russian environment are analyzed. Among these are the peasants, Tzar, nobility and Greek Orthodox Church. The major social and intellectual movements of the nineteenth century will be discussed.

## Political Science 512. Origin and Development of the Constitution, 1619-1835

This course is an intensive study of the origin and framing of the Constitution of the United States. It aims to search out the roots and influences that determined our basic political institutions. The seminar method is employed and attention is given to the techniques of historical research and writing as it applies to the early period in American history.

## Political Science 521. History of Political Thought

2 s.h.

The major theories of representative political philosophers concerning the nature, functions, organization, and sovereignty of the state are studied in this course. Among those discussed are: Plato, Aristotle, Cicero, Thomas Aquinas, Machiavelli, Luther, Calvin, Bodin, Hobbes, Locke, Spinoza, Montesquieu, Rousseau, Hume, Bentham, J. S. Mill, Burke, Hegel, Marx.

#### Political Science 522. Great Britain and the Commonwealth

2 s.h.

A study is made of the origins, membership, and working institutions of the British Commonwealth of Nations. Special attention is given to problems of the Commonwealth since 1945, in the light of Britain's altered position in international affairs and the development in Europe of regional economic organizations.

#### Political Science 551. Constitutional Law

2 s.h.

A study of the development of the Constitution and the Supreme Court of the United States illustrated through reference to court opinions as expressed in selected Supreme Court cases. Areas to be included are: the federal system; human rights; executive, judicial and legislative powers; and interstate commerce.

#### Political Science 552. The President and Congress

2 s.h.

The course concentrates attention on the organization, structure and powers of the national executive and legislative branches of government. Special emphasis will be placed on executive-legislative relationships, the nature and functioning of the legislative process, and the respective role of the President and Congress in the formulation of public policy in a modern democracy.

## Political Science 553. The Federal Courts

2 s.h.

This course concentrates attention on the structure of the federal courts and the manner in which they function. Comparisons and contrasts are drawn between the national and state judicial systems and the body of law which they interpret. Special attention is given to the role of the Supreme Court, both as arbiter of federal-state relations and as a restraint on executive and legislative authority. Some of the major decisions of the Supreme Court are examined in tracing the changes in judicial outlook and interpretation.

#### Political Science 554. American Political Thought

2 s.h.

This course deals with contemporary trends and theories as they have emerged from social and economic conditions and as they are founded upon the bases laid down by Hamilton, Madison, Washington, Jefferson, Marshall, Calhoun, Webster, Lincoln, and Wilson.

### Sociology 561. Religion in America

2 s.h

The study of the dynamics of religion in American society. Among the topics considered are contemporary trends in religious thought, religious social action, religious prejudice, and problems of church, state, and school in urban America.

#### Sociology 562. Theory and Method in Social Work

2 s.h.

Emphasis in this course is placed on the development of social welfare norms, and on the methodology of contemporary social work. Attention is given to the historical development of social welfare concepts and legislation, and to current trends in the field. Required for Sociology concentration.

## Sociology 563. Social Movements

2 s.h.

A critical analysis of the development of social movements and their effects on social legislation in the Twentieth Century. The dynamics of social movements in complex societies of the world are studied. Prerequisite: 562 or permission of instructor.

#### Sociology 564. Social Work and Education

2 s.h.

An advanced seminar dealing with the relationship of social work to professional education. The uses of selected techniques and concepts from the field of social work in contemporary education are emphasized. Students are encouraged to familiarize themselves with services offered by community social agencies to schools and educators. Prerequisites: 6 credits in Sociology, or by permission of the instructor.

## Sociology 565. Community Resources and Youth

3 s.h.

This course focuses attention on total resources for youth; for the healthy as well as deviant child. Emphasis is placed on resources in the child's own family and neighborhood, in addition to services provided by public and private agencies. Relevant federal and state legislation is surveyed.

## SENIOR-GRADUATE COURSES IN SOCIAL SCIENCES

## Social Studies 410. The Newspaper in the Classroom

2 s.h.

This course presents new and standard techniques in the use of the newspaper in the English and Social Studies classes in the secondary school.

#### Social Studies 482. Conservation and Rural Economic Life

2 s.h.

A study of one of the basic economic problems in America today, the course is designed to give the student a better understanding of the relationship between rural and urban living. Offered in cooperation with the New Jersey School of Conservation, trips are arranged to farms, dairy cooperatives, farm bureaus, banks, and town meetings.

## Social Studies 491. Studies in American Life—The East

2 s.h.

This course is a regional study of the United States east of the Mississippi River. It covers New England, the Middle Atlantic States, the South, and the Lake States. It deals with the physiographic, economic, historical and cultural patterns of these regions. It emphasizes the regional differences which characterize American unity and diversity. Motion pictures, lectures, maps, mimeographed materials are used.

#### Social Studies 492. Studies in American Life—The West

2 s.h.

This course is a regional study of the United States west of the Mississippi River. It covers the Plains States, the Mountain States, the Southwest, and the Pacific Coastal States. It deals with the physiographic, economic, historical and cultural patterns of these regions. It emphasizes the regional differences which characterize American unity and diversity. Motion pictures, lectures, maps, mimeographed materials, and bibliographies are used.

#### Social Studies 494. Social Studies and Conservation

2 s.h.

Everyday problems of living as they are related to and affected by the wise use of our natural resources are studied in this course. The student learns about the renewable resources, soil, water, forests, and wildlife, as well as the nonrenewable resources, minerals, oil, and coal. Economic, social, community, national, and individual problems are approached by giving the student first-hand experiences gained through extensive field trips in northern New Jersey.

#### Anthropology 401. Cultural Anthropology

3 s.h.

An introduction to anthropology as a field of knowledge: the background and development of culture; culture theory; the universals of culture, e.g., religion, art, leisure, education; the relationship of anthropology to science and the humanities. (Not open to social studies majors who have completed Anthropology 200.)

#### Anthropology 402. Dynamics of Culture

3 s.h.

Emphasis in this course is placed on the processes involved in cultural development, growth, transmission, perpetuation, and change. Students will be given the opportunity to study the impact today of modern industrial civilization on emerging nations and peoples.

#### Anthropology 403. Cultural Diversity

2 s.h.

The study of primitive and folk cultures as seen in contemporary perspective. The purpose of this course is to increase student awareness of the range and variety of cultures in today's world, and to improve understanding of factors which account for cultural variability.

## Anthropology 404. Folklore

2 s.h.

The study of verbal and non-verbal folk traditions in nonliterate and literate societies of the world. Types and functions of folklore, and methodologies employed by folklorists will be stressed.

#### Anthropology 405. Psychological Anthropology

3 s.h.

Emphasizing transcultural research, this course focuses on the interrelated nature of culture and the acquisition and modification of human behavior. Cross-cultural studies of the life crises form the basis for analyzing the world view and values of selected societies. Units of study are devoted to the cultural origins of deviant behavior, and to the development of creativity in culture.

#### Economics 401. Labor Economics

3 s.h.

The objectives of the course are: (1) to study the evolution of the institutions of the labor market; (2) to analyze the determinants of wage and non-wage aspects of labor-management relations; (3) to foster an understanding of the issues and alternatives in labor economics.

#### **Economics 402. International Economics**

The objectives of this course are: (1) to study the evolution of institutions of international economics; (2) to transmit the theory of international trade; (3) to foster an understanding of the impact of international trade on national economies; (4) to develop an appreciation of the international aspects of the goals of economic stability and economic growth.

#### Economics 403. Comparative Economic Systems

3 s.h.

The objectives of this course are: (1) to examine the ideological bases of capitalism, fascism, socialism, and communism; (2) to analyze the functioning of major types of economic systems; (3) to develop an understanding of the relationship between economic theory and economic policy.

#### Economics 404. Current Problems in Economics and Government

Designed to analyze the relationship of economics to government, the causes and results of governmental activity are discussed in the light of their economic significance and bearing on public welfare through a study of certain classical decisions of the Supreme Court involving those cases relating specifically to economic issues.

#### Economics 405. Money and Banking

3 s.h.

Introductory material of money, credit, and monetary standards precedes a more intensive study of the nature and functions of commercial banking. Special attention is given to the Federal Reserve system and its problems in co-ordinating monetary and credit policy with fiscal policy in order to fulfill its current responsibilities.

#### Economics 406. Workshop-Seminar in Economic Education

This course provides an introduction to economic analysis. Emphasis is placed upon techniques of incorporating economic education in both the secondary and elementary school curricula. Guest speakers provide an exposure to a variety of academic and lay professional points of view. Current materials in the field of economic education are evaluated, including written materials for teachers and students, films, filmstrips, models, charts, and diagrams. Teachers will be expected to conduct and evaluate an actual classroom experience in economic education during the course.

#### Geography 408. Political Geography

3 s.h.

This course deals with the geographic conditions influencing the significant changes in the political divisions of the world. Emphasis is placed on geographic factors influencing racial, religious, commercial, and political adjustment among nations.

## Geography 410. Urban Geography

3 s.h.

This course is a study of the growth, morphology, and function of cities. Attention will be given to the complex, dynamic forces which influence spatial patterns and functional changes within urban areas.

#### Geography 411. Historical Geography of the United States

3 s.h.

For students of history, geography, and related disciplines to become familiar with major principles of historical geography, it emphasizes the geographic factors pertinent to understanding of American history. Time-place relationships ranging from pre-Columbian America to the present are surveyed and analyzed critically. Attention is paid to source materials, to cartography of specific times, and to geographical lore and thought.

## Geography 412. Geography of Africa

3 s.h.

This course includes a topical and regional study of Africa. Emphasis is placed upon the problems of economic adjustment in the tropics. Soils, vegetation, climate, physiography, natural resources, and other aspects of the physical environment are examined in the light of man's habitation of the continent. Relations between Africa and the rest of the world are analyzed.

#### Geography 419. Geography of the Soviet Union

3 s.h.

This course is designed as a regional analysis of the Soviet Union. It examines the physical and human aspects of Soviet geography. Emphasis is placed on economic regions. Relations between the European states and the Soviet Union are discussed, and Russia's place in the world economy is analyzed.

#### Geography 421. Population Problems of the World

2 s.h.

An intensive examination of the factors which influence the present-day distributional pattern of the world's people and the political, economic, and social consequences of this development are considered. Particular attention is placed on man-land relationships as related to population problems of contemporary nations.

#### Geography 422. Geography of the American Indian

3 s.h.

This course is designed to survey the culture of the American Indian from the Ice Age to the Reservation in relation to his geographic environment. It affords an insight into the geography and cultural history of North America prior to the coming of the white man, deals with the problems experienced and created by alien cultures when they meet, and culminates with the Indian problems of the present day. It serves to introduce methods employed in interdisciplinary attacks upon cultural problems.

#### Geography 424. Geography of New Jersey

2 s.h.

A detailed topical and regional study of New Jersey, physiography, climate, soils, flora, fauna, agriculture, industry, trade, population, and relation with neighboring states are studied. On the basis of the data examined, an attempt is made to delineate the geographic regions of the state. Emphasis is placed on the relationship between New Jersey's people and New Jersey's earth.

#### History 411. Intellectual History of the United States

3 s.h.

Analyzes the development and contributions of the thought of individuals and groups, dominant and minority, and their effect upon the American mind and upon American traditions and practices.

## History 412. The Literature of American History

2 s.h.

Location, analysis, and use of the available source materials of American history and of the outstanding historical writings from the colonial period to the present.

## History 413. The West in American History

3 s.h.

A study of the exploration, settlement and development of the regions beyond the Mississippi river. The different types of frontiers are considered. Special attention is focused on the influences of the frontier in American Life.

## History 414. The South in American History

3 s.h.

The course deals with the development of the South from the earliest settlements to the present. Special consideration is given to those aspects of Southern life that have been distinctive and represent a special contribution to American Life.

#### History 415. History of Canada

3 s.l

This is a political, economic, and social survey of Canadian development which traces the growth of British North America towards an autonomous status within the British Commonwealth. Special emphasis is placed on Canada's relationship with the United States.

#### History 416. History of Latin America

3 s.h.

This course deals with Latin America from the pre-Columbian era to the end of the wars of independence. Stress is placed upon the geographical background and the development of the Maya, Inca, and Aztec civilizations. After considering the Spanish and Portuguese backgrounds of the Latin-American people, consideration is given to the European cultures established in the New World. In dealing with the wars of independence in Latin-America, comparisons are made with the American Revolution.

## History 421. Renaissance and Reformation

3 s.h.

A study of political, economic, social, religious, and general cultural developments in Europe from about 1400 to 1600. Basic interpretations of the Renaissance and Reformation are examined and discussed.

## History 422. Age of Reason

3 s.h.

A study of Seventeenth and Eighteenth Century Europe, with emphasis on the important intellectual currents of the period. Trends and conditions in France and England are emphasized. Selected readings are done in the works of representative figures of the period: Bacon, Descartes, Locke, Rousseau, Montesquieu, Voltaire, Hume, Adam Smith, and others.

#### History 423. Russia Since 1917

2 s.h.

An analysis of Russia's relations with China, Iran, Turkey, the European continent, England, and the United States is presented. Marxist world policy, as interpreted by Kautsky, Plekhanov, Jaures, Bukharin, Trotsky, Lenin, Stalin, and others is described. The changing views of Second and Third Internationals, and the organization and methods of th Comintern are discussed.

#### History 424. Diplomatic History of Europe

3 s.h.

A study of the diplomatic history of Europe since the Congress of Vienna. Emphasis is placed on the development of diplomatic practice and relations between states during the period 1870 to the present. The diplomatic origins and consequences of World War I and World War II are examined and compared. An analysis is made of Europe's importance in contemporary world diplomacy.

## History 425. Intellectual History of Europe

3 s.h.

A study of important movements in European thought, with emphasis on the Nineteenth and Twentieth Centuries. Selected readings are done in the work of representative figures of the period: Burke, Mill, Hegel, Comte, Marx, Nietzsche, Freud, and others.

#### History 427. French Revolution and Napoleon

3 s.h.

An analysis of the background of the French Revolution, its changing course, and cast of characters during 1789-99, and the advent to power and imperial regime of Napoleon Bonaparte, 1799-1814. The expansion of the Revolution and its significance for Europe are examined.

## History 429. Britain in the Twentieth Century

3 s.h.

An analysis of the major problems, economic, social, political, and international, which have confronted Britain in the Twentieth Century. The plans and policies of Conservative and Labour governments since 1919 are examined and compared.

#### Political Science 401. Comparative Governments

3 s.h.

This course offers an opportunity to study the political systems of the major world powers. Attention is given to the political institutions of Great Britain, France, and the Soviet Union. In each instance, political institutions are viewed against their economic and social backgrounds. Frequent comparisons are drawn between the American federal government and the foreign government considered in this course.

#### Political Science 402. American Party System

3 s.h.

An examination of the structure and functions of the American party system. Included in the study are: party organizations, the political boss, the political machine, the process of voting, election laws, primaries, conventions, platforms, presidential elections, majority rule, the party system, sectional politics, the farm vote, the labor vote, the Negro vote, and the future of party government in the United States.

## Political Science 403. Public Opinion and Pressure Groups

3 s.h.

An investigation into the nature and development of public opinion and pressure groups and their influences on matters of public policy. Attention will be focused on the role of public opinion as it may affect the political processes such as the nomination of candidates and foreign and domestic policy decisions.

#### Political Science 404. International Relations

3 3.11.

A study of the modern international system; the forces affecting the interaction of states in their relations with one another; the resultant conflicts of interest and methods to resolve these conflicts. Special attention will be given to nationalism, imperialism, power politics, and conflicts.

## Political Science 405. State and Local Government

2 s.h.

The municipal, county, and state governments of New Jersey furnish the principal subject matter of this course. Federal-state and interstate relations are explored and comparisons are drawn between New Jersey political institutions and those of other states.

#### Political Science 406. International Organization

2 s.h.

The attempts of the international community of states to express itself in a formal world organization are the subject of this course. The agencies which have been established to deal with international, legislative, executive, administrative, and judicial problems are studied, including the international courts of justice, League of Nations, and United Nations.

#### Political Science 451. Contemporary Africa

3 s.h.

This course is designed to give the background with which to develop an understanding of the social, political, and economic trends of modern Africa. An effort is made to establish the natural and historical setting for a consideration of colonial issues and policies, as well as decolonization and independence.

#### Political Science 452. The Far East

3 s.h.

A study is made of the economic, social, and cultural situation of the Far East, with particular emphasis on the geographic and historical background of India, China, and Japan. Political and social institutions are discussed with special attention to religion and education.

#### Political Science 453. South Asia

3 s.h.

Designed to give an understanding of political, economic, and cultural problems of contemporary South Asia, emphasis is given to post-World War II domestic problems of India, Pakistan, Ceylon, and their international relations with the world community.

## Political Science 454. Modern Latin America

3 s.h.

This course is designed to give an understanding of the economic, social, and political character of contemporary Latin America. The history of these nations from their wars of independence to the present serves as background for the present state of affairs in this region. Students are given an opportunity to read works of Latin-American authors, to hear speakers from that area, and to see recent films.

#### Political Science 455. The Middle East

3 s.h.

Starting with a consideration of the factors and forces that shape middle eastern civilization, this course goes on to consider the particular influences operating in the individual countries of the region. The nature of Islam is discussed along with the role of elements making for change, such as technology, the army, and the cold war. Many of the countries of Southwest Asia and North Africa are studied.

#### Sociology 401. Modern Sociology

3 s.h.

An introduction to sociology: the scope and aims of sociology; group behavior; social institutions in America; social organization, stratification, and change; the development of social leadership. (Not open to Social Studies majors who have completed Sociology 200.)

#### Sociology 402. Social Pathologies

3 s.h.

This course examines the nature and scope of social problems and deviant behavior in American society. Among the major, social problems considered are juvenile delinquency, crime, poverty, prejudice, and our aging population. Public welfare programs concerned with rehabilitation and assistance are stressed throughout the course.

#### Sociology 403. Youth and the Community

2 s.h.

A sociological study of youth in contemporary rural, urban, and suburban America. Special consideration is given to social conditions giving rise to problems of maladjustment, anomie, and behavioral disorders in children and adolescents. Youth sub-cultures, and their effect on the school and community, are examined.

#### Sociology 404. The Family as an Institution

3 s.h.

This course examines the development of the family unit as an institution within society. Emphasis is placed upon an analysis of the family in contemporary American society. The family is sociologically examined as an institutional form, a social system in process, and as a socializing agency.

## Sociology 405. Urban Sociology

3 s.h.

The study of the urban revolution and historic development of cities; the political and economic functions of cities; industrialization, urbanization and deracination; urbanism as a modern way of life. Urbanism is viewed not only as a new type of society, but as a process that is replacing all former types.

#### Sociology 406. Rural Sociology

3 s.h.

During this course, offered at the New Jersey School of Conservation, the student comes face to face with rural life in northern New Jersey. Social processes and problems are considered. Opportunities are provided for students to attend Grange meetings, county fairs, rural dances and parties, and to live for a day or two with a farm family.

#### Sociology 407. Race and Ethnic Relations in the United States

3 s.h.

This course is an examination of the historic problem of race and ethnic relations in the United States. The principal racial, ethnic, and religious minorities are considered against the social structural factors that underlie inter-group conflicts. In addition, those factors other than discrimination which seriously deter equal group achievement and integration are analyzed.

#### Sociology 408. Sociology of Poverty in the United States

3 s.h.

This course is a sociological study of poverty as a major domestic problem. Attention is given to the causes and effects of social deprivation as well as to historical and contemporary efforts at its solution.

## COURSES IN FIELD STUDIES

## Field Studies 401. Continental United States

10 s.h.

This field-study course consists of sixty-two days of directed travel, including all of July and August, and provides an opportunity for gaining an integrated view of our country as a whole. All important geographic and historical features are studied under the instructions of members of the college faculty and local specialists.

#### Field Studies 402. Central Eastern Region

2 s.h.

This fifteen-day tour of Pennsylvania, Maryland, Virginia, West Virginia, North Carolina, and Tennessee covers the major points of historic interest associated with the Colonial Period, the American Revolution, and the Civil War, and the geographic features of the coastal plain, the Piedmont, the Great Valley, and the Appalachian Mountains in these states.

#### Field Studies 403. New England and French Canada

2 s.h.

This field study course gives an opportunity to study by direct observation the historical and geographical features of New England and the Province of Quebec. This trip, occupying the twelve days immediately following the summer session, is made in a modern chartered motor coach with overnight stops at first-class hotels.

#### Field Studies 404. Florida

2 s.h.

This is a field-study course covering the Florida Peninsula including both coasts, the Everglades, and the Lake Region. Among the places visited are ancient St. Augustine; the winter playground at Palm Beach and Miami; the Tamiami Trail through the Everglades: the west coast cities of Sarasota, St. Petersburg, and Tampa, and the Lake Region in the neighborhood of Lake Wales and Orlando. The trip affords opportunity for topographical, historical, and industrial studies. It is usually given during the Easter vacation.

#### Field Studies 405. Gulf Coast and Lower Mississippi Valley

2 s.h.

This is a field study covering the Gulf Coast from Mobile to New Orleans. It surveys economic, geographic, and historical aspects of the lower Mississippi Valley. Some places visited are Mobile, Biloxi, New Orleans, Baton Rouge, Natchez, Vicksburg, and Jackson.

#### Field Studies 406. Puerto Rico and Virgin Islands

2 s.h.

This is a nine-day field-study course devoted to a survey of our nearest island possessions. It includes an exploration of San Juan and its vicinity, including the University and the rain forest, a two-day trip through the island visiting pineapple, coffee, sugar, textile, and rumproducing areas, churches, homes, and historic places. One day is spent in St. Thomas, largest of the Virgin Islands. The trip to and from the islands is made by air. It is usually offered during the Christmas holidays,

#### Field Studies 407. Hawaii

3 s.h.

This is a twenty-day field-study course devoted to a study of our fiftieth state. It covers the islands of Oahu, Hawaii, Maui, and Kauai, and investigates all of the major geographic, historic, economic, and cultural features of the islands. Among the high points are Honolulu, and its environs, including Pearl Harbor; the pineapple, sugar cane, and papaya plantations of Oahu as well as the villages, mountain terrain, architecture, and historic spots; the Kona coast, the city of Hilo, the Kilauea crater and lava flows, the steam vents and sulphur banks, and the tree fern forests; the volcanic phenomena of the islands of Maui, and the canyons, caves, and geysers of Kauai, as well as the rice paddies. There are visits to schools and public buildings and opportunities to meet people of all classes.

#### Field Studies 411. Mexico

3 s.h.

This field-study course aims to give a comprehensive view of contemporary Mexican life with its geographic, economic, historic, and cultural setting. Transportation to and from Mexico City is by air and in Mexico by private cars. Places visited include Xochimilco, Acolman, Teotihuacan, Fortin, Puebla, Oaxaca, Guadalajara, Queretaro, Quanajuato, Patzcuaro, San Miguel de Allende, San Jose Purua, Morelia, Toluca, Taxco, and Cuernavaca. The itinerary is carefully planned to include all points of major interest and significance. Special studies may be made in geography, history, art, architecture, archaeology, sociology, economics, and other fields.

#### Field Studies 412. Maritime Provinces of Canada

3 s.h.

This is a twenty-one day field study covering Nova Scotia, Cape Breton Island, New Brunswick, and the Gaspe. The route runs through Vermont and Quebec to the Gaspe. It covers Nova Scotia and Cape Breton Island, including the Cabot Trail, and returns through Maine, New Hampshire, Massachusetts, and Connecticut. Among places visited and topics studied are: Riviere du Loup, picturesque fishing villages along the River and Gulf of St. Lawrence; lumbering and pulpwood operations; Gaspe; Perce with its bird sanctuary; Moncton, New Brunswick, with its tidal bore; St. John, New Brunswick, with its reversing falls; Truro, Digby; Grand Pre; Annapolis Royal; Lunenburg; Halifax, Sydney; Louisburg; Cape Breton Highlands National Park, the history of the conflicts between the French and the English for this territory, geographical and scenic phenomena, and customs and daily life of French-Canadian and English-speaking people of the region are observed.

## Field Studies 413. Three Contrasting Caribbean Cultures: Curacao, Caracas, Trinidad

2 ch.

This field study course will study the Dutch culture of the island of Curacao, the Spanish culture of Caracas, Venezuela, and the English culture of the island of Trinidad. Stops will also be made in Barbados. Since the western islands of the West Indies can no longer be visited, this, together with the Puerto Rico-Virgin Island tour given at Christmas, provides a unique opportunity to become familiar with the best aspect of the Caribbean area. These two trips complement each other.

#### Field Studies A414. Yucatan and Guatemala

2 s.h.

This field studies course deals mainly with Toltac, Aztec, and Mayan civilizations of Mexico and Guatemala. A brief visit to Mexico City, covering the Temples of the Sun and Moon and the Guatemalan Shrine, as well as some of the modern aspects of the City, will be followed by a trip to Merida and the Mayan ruins at Chichen-Itza in Yucatan. In Guatemala, Guatemala City and Antigua (the former capital) and the Indian village of Chichi-Castenanga will be visited. This is a opportunity to observe the ancient and contemporary cultures of these regions.

#### Field Studies 421. Mediterranean Region and Holy Land

6 s.h.

This is a seven-week field study of the countries adjacent to the Mediterranean Sea, including short stops in Paris, Madrid, and Athens, and more intensive studies of Italy, Turkey, Syria, Lebanon, Israel, Jordan, Egypt, Tunisia, and Morocco. The ancient and modern civilization of these countries will be studied with particular attention to their significance in the contemporary world. Opportunities for special studies in specific areas of geography or history will be available to students.

#### Field Studies 422. Soviet Union and Eastern Europe

6 s.h.

This field study provides an exceptional opportunity to study the social, economic, and political systems of the Soviet Union and other communist countries. The group will fly from Copenhagen to Warsaw and Moscow, Leningrad, and Kiev, and then proceed to Alma Ata, Tashkent, Bukhara, Samarkand, Dushanbe, Tbilisi, and Sochi. It will return to Copenhagen via Budapest, Vienna, and Prague.

#### Field Studies 423. The British Isles

3 s.h.

This field study of the British Isles will begin in Ireland and continue through Scotland, Wales and England. It will include cities such as Dublin, Killarny, Cork, Edinburgh, Southampton and London, and the historic and picturesque countryside with its lakes, hills, castles and cathedrals. Opportunities will be offered for the study of the geography, history, literature, economics, and social patterns of these areas.

#### Field Studies 431. South Pacific

6 s.h.

This is a seven-week field study course covering the islands of the South Pacific region, Australia, and New Zealand. The purpose of this course is (1) to study the various culture patterns of these islands, (2) to appreciate their significance in recent history and in the future history of the Twentieth Century, (3) to understand the importance of Australia and New Zealand in the modern world. Among the places to be visited are Tahiti, Fiji, New Zealand, Australia, East New Guinea, Papua, New Caledonia, the Isle of Pines, Samoa, Hawaii, and other islands. The geographic, historical, economic, and anthropological patterns of the region are studied. There are visits to farms, mines, schools, public buildings, and native villages, and opportunities to meet people in all sorts and conditions of life.

#### Field Studies 432. North Pacific

6 s.h.

This is a seven-week survey of the North Pacific area including Hawaii, Japan, and Alaska; about two and a half weeks are spent in each of the three areas. In Hawaii all four of the leading Hawaiian Islands (Oahu, Hawaii, Maui, and Kauai) are studied. In Japan, studies will be made in Tokyo, Nikko, Kyoto, Nagoya, Hakone, and other areas emphasizing Japan's economic progress, education, home life, scenic and cultural features, and the people of Japan. In Alaska, Anchorage, Nome, Kotzebu, Juneau, and other centers are visited; seeing Eskimo, pioneer, and contemporary life, emphasizing ways of living, crafts, and the economic and social developments of the forty-ninth state.

#### Field Studies 451. World Survey

4 s.h.

This is a thirty-five day field-study course planned to give the student a general comprehensive vision of the kind of a world we live in with its varying culture patterns and problems. The itinerary covers the Tokyo and Kamakura area in Japan; Manila and its environs in the Philippines; Calcutta, Delhi, Agra, and Bombay in India; Cairo and Memphis in Egypt; Hong Kong, and the Kowloon Peninsula in southeast China; Bangkok in Thailand; Jerusalem and Damascus in the Holy Land, Baalbeck and Beirut; Istanbul; Athens and Corinth; and Rome.

## THE DEPARTMENT OF SPEECH

Graduate Advisor: DR. L. HOWARD FOX

Speech education in the schools of New Jersey has received increasing recognition in recent years with the conviction that effective oral communication is important to the achievement of self-realization, vocational competency, social effectiveness, and good citizenship. Additional programs of speech are being established to provide developmental and corrective work according to each student's needs. The effectiveness of those programs depends upon the sound and extensive preparation of master teachers who can organize and supervise speech programs and who can offer dynamic leadership in helping to integrate the speech program in the over-all school curriculum.

The graduate program in speech allows qualified students to specialize in one of two areas of speech education: speech arts or speech therapy. The candidate may also, through his choice of elective courses, strengthen his competencies in both areas.

It is expected that each graduate student will have at least one of the following goals for his work:

- To be further qualified as a speech therapist in schools and special institutions.
- To increase his skill as a teacher of speech and dramatics in secondary schools.
- 3. To complete requirements for certification in the State and in the national professional organization, the American Speech and Hearing Association.

# PREREQUISITES FOR ADMISSION TO THE PROGRAM IN SPEECH ARTS

Students wishing to matriculate in this area of specialization must have completed the following courses, or equivalents, and hold a New Jersey State Department of Education certificate in Speech Arts.

Each student must also be capable of setting a good example of acceptable speech. If his voice and speech patterns are considered to be substandard he will be required to take Speech 550 early in his period of matriculation; if the speech problem is severe, he may be refused permission to matriculate.

M.S.C. COURSES meeting the

Area: requirements:

Fundamentals of Speech: Speech 439A, 439B, 472, 100, 103, 104,

208, 550.

Public Speaking: Speech 204, 449, 462, 470.

Oral Interpretation: Speech 106, 448.

Methods in the Teaching of Speech: Speech 417.

Dramatics: Speech 107, 108, 435, 436, 437A, 437B, 438, 456, 471.

## REQUIREMENTS FOR THE M.A. DEGREE IN SPEECH ARTS

I. General Education (see Master's Degree Program Pattern) 6-12 s.h.

II. Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h.

III.	Specializati	ion Co	urses	11-20	s.h.
	A. Require	ed Cou	rses		
	Speech Speech Speech Speech	462 470	Group Discussion, or Argumentation and Debate, or 2-3 s.h.		
	Speech				
	Speech	592	Areas and Techniques of Research in Speech	3	s.h.
			Minimu	m: 32	s.h.
	B. Electives: Through advisement based on needs and interests.				
	Speech Speech Speech	438. 448. 457.	Fundamentals of Stage Lighting Creative Dramatics Choral Speaking Directing the Assembly Program	2 2	s.h. s.h. s.h.
	Speech		Psychology of Oral Communication		
	Speech Speech	550.	Advanced Study of Voice and Speech Production	1 3	s.h.
	Speech		Scenery Design and Construction		
	Speech		History of the Theatre	2	s.h.
	Speech		Costume and Make-up for Stage		
	Speech	590.	Problems in the Teaching of Speech	3	s.h.

## IV. Additional Departmental Requirements:

A. Written Comprehensive Examination. (To be given in the spring of each year.)

Speech 591. Organization and Administration of School

B. Oral demonstration of communication skill.

Prior to the student's final semester, each Master's degree candidate must give evidence of satisfactory platform or performance skill beyond the prerequisite requirement of satisfactory personal speech. The type of performance or demonstration is to be arranged with his advisor prior to the scheduling or any such event; its nature will depend upon the individual experience and goals of each candidate.

# PREREQUISITES FOR ADMISSION TO THE PROGRAM IN SPEECH THERAPY

Students wishing to matriculate for the Master of Arts in Speech Therapy must have completed thirty semester hours in the following courses, or equivalents, and hold or be eligible for a New Jersey State Department of Education certificate in Speech Correction:

Each student must also be capable of setting an example of acceptable speech. If his voice and speech patterns are considered to be substandard, he will be required to take Speech 550 early in his period of matriculation; if the speech problem is severe, he may be refused permission to matriculate.

A minimum of 9 s.h. in Professional Education Courses, with at least one course in each of the following areas:

Principles and Practices of Education Educational Psychology Curriculum

A minimum of 18 s.h. in the following	owing courses or their equivalents:
	Undergraduate M.S.C. course(s)
Course:	meeting this requirement:
Psychology and Education of the	Parish 452
Handicapped Phonetics	Psych. 452 Speech 104
Anatomy and Physiology of the	Speech 104
Auditory and Vocal Mechanism	Speech 208
Speech Correction	Speech 209
Speech Pathology	Speech 410
Clinical Practices in Speech	Speech 461A, 461B
Measurement of Hearing (Audiology)	Speech 468
Voice Diction Improvement	Speech 103
REQUIREMENTS FOR THE M.A. I	N SPEECH THERAPY
I. General Education (see Master's I	
	Master's Degree Program Pattern) 6-9 s.h.
III. Specialization	11-20 s.h.
A. Required Courses:	9 s.h.
Speech 535A. Graduate Sem	
	orders
	orders
Speech 531. Advanced Aug	diology, or approved elective 3 s.h.
Speech 592. Areas and Tec	hniques of Research in Speech 3 s.h.
*These courses taken concurrently management for part-time graduate study	ay constitute full-time summer session re-
B. Elective Courses:	2-11 s.h.
	lowing courses will be determined through
advisement and will be based	on needs and interests.
	ech Pathology 3 s.h.
	osis
	ers
	ction
Speech 481A, 481B. Teachin	
Speech 482. Stuttering	2 s.h. each 2 s.h.
Speech 483A 483B Methods	s and Material in Teaching Speech
	mpaired Children 2 s.h. each
	and Oral Deformities 2 s.h.
	Speech and Hearing Programs 2 s.h.
	atomy and Physiology of the
	onetics
	Speech Rehabilitation
	Oral Communication 2 s.h.
Speech 472. Voice Science	2 s.h.
Speech 594A, 594B. Indepen	
	abilitation 1 s.h. each 2 s.h.
	diology
Speech 550. Advanced Stud	ly of Voice and Speech Production 3 s.h.

## IV. Additional Departmental Requirements:

- A. Written Comprehensive Examination.
- B. Oral demonstration of communication skill.

Each candidate, as indicated in the requirements for acceptance, must have acceptable speech himself. In addition, the department must be satisfied that the candidate can perform satisfactorily in an audience situation. This will be determined on an individual basis; it may involve some nonteaching experience and speaking appearance to be arranged through a departmental advisor.

C. Majors in speech pathology must complete a total of 275 hours of supervised direct clinical experience.

## **GRADUATE COURSES**

## Speech 522. Advanced Phonetics

2 s.h.

Skill in the use of phonetics is developed further in recognizing and distinguishing acceptable English speech sounds, deviant speech sounds, regional variations in standards of American English, and sounds in foreign languages. Additional study is devoted to the stress, phrasing, and intonation patterns used in speaking English, with some analysis made of these elements in other languages. Prerequisite: Sp. 104 or equivalent.

## Speech 531. Advanced Audiology

3 s.h.

The purpose of this course is to increase skill in administering tests for determining pure-tone and speech reception threshholds. Emphasis is placed on evaluation and interpretation of test results and on the analysis of client histories. Principles and techniques of hearing aid evaluation, measurement of recruitment, and tests for psychogenic deafness and malingering are studied. Consideration is also given to pre- and post-surgical audiometry, and to the special problems of differential diagnosis in testing children. Prerequisite: 60 clinical hours in speech practicum.

#### Speech 532. Practicum in Speech Rehabilitation

2 s.h.

This course provides advanced students with the opportunities for the practical application of diagnostic and rehabilitative techniques with children and adults who have major speech and language problems. Qualified students participate in specialized laboratory experiences which include planning and supervising speech therapy sessions, providing rehabilitative services to individuals and small groups, interviewing applicants, and administering audiometric tests. Prerequisite: 60 clinical hours in speech practicum.

#### Speech 533. Supervision of Speech and Hearing Programs

2 s.h.

Methods of organization and administration of the speech correction and improvement programs are discussed. Emphasis is placed upon problems of screening, referral, speech-staff training and orientation, in-service courses, parent and community relations, integration with other disciplines, and development of new materials for testing, teaching, and evaluating.

# Speech 534. Advanced Anatomy and Physiology of the Vocal and Auditory Mechanisms

3 s.h.

The basic anatomy of the mechanisms of speech reception and expression is reviewed. Consideration is also given to the integrated functioning of the central nervous system, the automatic nervous system, and the endocrine system. The effects of abnormalities of structure and function of the speech and hearing processes are emphasized. Discussion includes the medical and surgical aspects of rehabilitation, and the hygiene of the ear, nose, and throat. Demonstrations and supervised laboratory dissections are included. Prerequisite: Sp. 208 or equivalent.

#### Speech 535A. Graduate Seminar in Speech, Hearing, and Language Disorders

3 s.h.

## Speech 535B. Graduate Practicum in Speech, Hearing, and Language Disorders

3 s.h.

Emphasis is placed upon the diagnostic, therapeutic, and evaluative techniques employed in working with children and adults who have speech disorders of organic etiology. Minimum of 135 clock hours of supervised teaching must be accumulated. Prerequisite: Sp 410 (These courses taken concurrently may constitute full-time summer session requirement for part-time graduate students.

## Speech 550. Advanced Study of Voice and Speech Production

3 s.h.

The study is made of materials and methods used in the teaching of speech fundamentals on the junior high and senior high school levels. Review and further application of basic subject matter, including English and comparative phonetics, are stressed. Opportunities are provided for practice in improving or further developing personal voice and speech skills, in directing the practice of students with minor speech difficulties, and in phonetically transcribing speech from phonograph records or tape recordings. Some consideration is given to methods of helping students for whom English is not a native language to improve their voice and speech. Prerequisite: Sp. 100, Sp. 103, or equivalent.

#### Speech 563. Scenery Design and Construction

3 s.h.

This course is designed to extend the advanced speech student's knowledge in scenery design and construction techniques. Special emphasis is placed upon stage design as related to the play, the director, and the audience. The course of study includes a survey of the styles of design and the use of the perspective sketch and stage model in planning the stage setting. The application of stage construction techniques is used to demonstrate the necessity of scene design in planning the stage production. Each student is expected to design and plan the construction of scenery for a play appropriate for production in a secondary school.

#### Speech 565. Advanced Oral Interpretation

2 s.h.

This course is designed to provide further study of techniques in interpretation of poetry and prose. Extensive practice is provided in the analysis and presentation of various types of literary material (short story, ballad, narrative, sonnet, etc.) suitable for use in the classroom and for special programs. Prerequisite: Sp. 106 or equivalent.

## Speech 566. Costume and Make-up for the Stage

3 s.h.

This course provides the advanced student with opportunities to design costumes and make-up for plays of various periods. Consideration is given to the use of materials, colors, and textures in achieving desired effects on the stage. Laboratory work is provided to develop skill in creating a wide variety of make-ups.

#### Speech 567. Seminar in Dramatic Production

6 s.h.

This seminar is for advanced play-production students. It allows each member of the class to pursue projects in keeping with his needs or interests in both the technical and directorial aspects of play production. When possible, supervisory assignments are made in connection with the current program of plays. The seminar meets a minimum of four hours daily for individual project or laboratory activities, for evaluation of specific teaching problems in connection with the current plays, and for group analysis of typical production problems. Enrollment is open only to matriculated graduate students and others with permission.

#### Speech 590. Problem in the Teaching of Speech

3 s.h.

This course is designed to present an analysis and investigation of the problems encountered in the speech classroom, and to survey the textbooks and teaching aids available to the teacher of speech on various grade levels. Consideration is also given to the problems of (1) motivation, (2) methodology, (3) evaluation procedures, and (4) co-curricular speech activities.

## Speech 591. Organization and Administration of the School Speech Program 2 s.h.

The course is designed to present an analysis and investigation of the problems encountered program in a school system. Consideration is given to curriculum development, teacher-administration relationships, class scheduling, reports and records, in-service training, and integration of the speech program with the total school curriculum.

#### Speech 592. Areas and Techniques of Research in Speech

3 s.h.

Methods of research appropriate for studies in speech are analyzed. Significant problems in the field are investigated and discussed, and published research projects are evaluated. Special attention is given to the problems of locating and utilizing professional journals and other publications for research. Each student is required to prepare an outline for a research project, to develop a bibliography, to complete the research, and to submit a formal report of the project. Prerequisite: Educ. 503.

#### Speech 594A, 594B. Independent Study in Speech Rehabilitation 1 s.h. each

Students on the graduate level may select an area of speech rehabilitation and with advisement study the literature in the field, observe therapy at special schools and centers, and write reports on findings. Regular conferences with their instructor are arranged for guidance and for evaluation.

#### SENIOR-GRADUATE COURSES

The following courses may be applied as prerequisites or equivalencies for admission to the program. In certain instances some are acceptable for graduate credit if the advisor so recommends.

#### Speech 410. Speech Pathology

2 s.h.

This course presents a study of the etiology and pathology of major language and speech disorders which may result from organic, functional, or emotional disturbances: servere stuttering, dysphonia, larryngectomy, cleft palate, cerebral palsy, and aphasia are included. Emphasis is placed upon diagnosis, evaluation, and rehabilitation. Prerequisite: Sp. 439B, or the equivalent.

## Speech 411. Advanced Speech Pathology

3 s.h.

The purpose of the course is to provide further study and evaluation of modern techniques of speech rehabilitation, and to review research findings in the areas of voice, articulation, rhythm, and symbolization disorders. Consideration is given to the ways in which speech rehabilitation may be integrated with related health services and educational services in schools and special centers. Prerequisite: Sp. 410 or equivalent.

## Speech 412. Speech Diagnosis

3 s.h.

The purpose of this course is to analyze and evaluate popularly employed techniques of speech diagnosis. Commercially available diagnostic tools, as well as tests that may be designed by the therapist to meet specific needs are discussed. Consideration is also given to the dynamics of interviewing and to the reporting and interpreting of client histories. Specific methodology useful in providing speech rehabilitation services to children and adults with speech and language disorders is evolved. Prerequisite: Sp. 410 or equivalent.

## Speech 435. Stagecraft

2 s.h.

This workshop course provides advanced training in constructing and painting of scenery and in lighting the stage. A minimum of twelve clock hours in the scene shop is required, in addition to the regular class sessions. Recommended prerequisite: Sp. 108 or the equivalent.

## Speech 436. Fundamentals of Stage Lighting

3 s.h.

The purpose of the course is to analyze the functions of lighting on a stage and to study and use the instruments available to achieve desired effects. Optimum and minimum equipment are studied. The laboratory work is done in the two theaters at the College, which house modern and flexible stage lighting equipment, and in a small auditorium with limited facilities. Students are encouraged to apply the principles of stage lighting to the specific auditorium in which they work. Appropriateness of lighting for different types of stage activities is a fundamental consideration in the course. Prerequisite: Sp. 108 or Sp. 435 or special permission of the instructor.

#### Speech 437A. Dramatic Production Workshop, Acting

2 s.h.

#### Speech 437B. Dramatic Production Workshop: Technical Theater 2 s.

These courses are designed for those students desiring a comprehensive introductory course in theater production. Students participate as junior members of the summer-theater company. They place special emphasis upon either stagecraft and lighting, or acting. In addition, they participate in the costuming, make-up, and house-management activities. These courses may be used as partial fulfillment of the requirements of the undergraduate speech major or minor, or as a prerequisite to matriculation for the Master's degree in Speech.

## Speech 438. Creative Dramatics

2 s.h.

The purpose of this course is to study the principles and techniques of creative dramatics as they may be applied in the classroom, theater, and speech therapy program. Major emphasis is placed on materials for dramatization paralleling the mental, physical, and emotional levels of children in grades kindergarten through eight. Application of these techniques with high school students is also considered. The philosophy of creativity is discussed, and attention is given to the integration of the arts with the total educational program. The course includes a workshop in which members of the class plan and carry out creative activities with children.

## Speech 440. Theater History: Classical to Elizabethan

2 s.h.

This course is designed to offer the student a comprehensive view of the development of the theater from the classical Greek through the Elizabethan period. Special attention is placed upon plays and playwrights of the period, theater architecture, scenery, cosuming, styles of acting and presentation of each period. Course work includes oral reports, lectures, and class-room demonstrations.

## Speech 441. Theater History: Restoration to Modern

2 s.h.

This course is designed to extend to the student a comprehensive view of the development of the theater from the Restoration through the modern period. Special attention is placed upon plays and playwrights, theater architecture, scenery, costuming, styles of acting and presentation of the period. Course work includes oral reports, lectures, and classroom demonstrations.

## Speech 448. Choral Speaking

2 s.h.

In a speaking choir, students acquire skill in interpreting literature suitable for group practice. Consideration is given to various grade levels in teaching. Students prepare a group of selections for their particular interests and purpose.

#### Speech 449. Advanced Public Speaking

2 s.h.

This in an advanced course in the theory and practice of public speaking. It provides opportunities for further training in more complex speech skills, especially in persuasive speaking, and conducting a meeting. Prerequisite: Sp. 204 or the equivalent.

#### Speech 456. Play Direction

3 s.h.

This course covers choosing, casting, and directing plays. Scenes are directed for class criticism, and a detailed prompt-book of one play is prepared. If possible, this play is given publicly before an audience. This course complements Sp. 435. Prerequisite: Sp. 437B, or permission of the instructor.

#### Speech 457. Directing the Assembly Program

2 s.h.

It is the purpose of this course to prepare students to organize and to conduct assembly programs. Class lectures and discussions cover all phases of the director's responsibilities. Groups conduct research on suitable program materials and share their findings. Each student prepares either a detailed script for an assembly or commencement program or a comprehensive set of notes and materials.

#### Speech 461A, 461B. Practicum in Speech Correction, I and II

2 s.h.

Remedial speech laboratories are maintained at the College as a community service so that students may apply their knowledge of diagnostic, remedial, and evaluative techniques in a professional laboratory experience. Students assist staff members in demonstrations, prepare lesson plans for individual and group speech therapy and teach under supervision. Prerequisites: Phonetics and Speech Correction.

#### Speech 461C. Advanced Practicum in Speech and Hearing

2 s.h.

This course provides further opportunities to apply techniques of speech and hearing rehabilitation under supervision in a laboratory setting. Students are required to: (1) administer audiometric tests and speech diagnostic examinations; (2) work with parents of children who have speech disorders; and (3) assist the beginning student speech therapist in planning and carrying out therapy sessions. Prerequisite: Sp. 461A and B.

#### Speech 462. Group Discussion and Leadership

3 s.h.

The purpose of this course is to study the principles of democratic discussion and the methods employed in guiding and participating in the informal group discussion, and in the panel, symposium, lecture, and debate forum. Parliamentary procedure is considered. Opportunities in the application of principles and methods studied are given through student participation in discussion programs dealing with community and national problems. Attention is also given to the ways in which group discussion may be used as an effective teaching method in the general school curriculum.

## Speech 464. Psychology of Oral Communication

2 s.h.

This course deals with the development of speech and language in the individual and the problems of communication that lead to confusion of meaning and misunderstanding. Consideration is given to the psychology of persons who are handicapped in speech, hearing, and/or reading, including those with hysterical or psychogenic impairments. The contributions of learning theory and of semantics of communication are studied.

## Speech 466. Speech Development: Improvement and Re-education 2 s.h.

This course is intended for superintendents, principles, and classroom teachers who have little or no background in speech education. Consideration is given to the following topics: (1) speech development; (2) speech difficulties or problems found in the kindergarten, elementary, and secondary schools; (3) acquisition of good voice and speech characteristics; (4) use of techniques and materials in classrooms to motivate good speech patterns; and (5) ways of organizing and integrating speech education within school systems. Demonstrations with individuals and groups are made, and students are expected to prepare a practical project. (Not for Speech majors.)

## Speech 468. Measurement of Hearing

3 s.h.

A comprehensive study of the measurement of hearing is made in this course with attention given to the educational implications of partially impaired audition and of deafness. A review of the physics of sound and the anatomy and physiology of the auditory mechanism is included. Emphasis is placed on principles and techniques of screening tests, interpretation of test results, and pure-tone and speech audiometry. Demonstrations and supervised practice are provided. Prerequisite: Sp. 208 or equivalent.

#### Speech 469. Auditory Rehabilitation

2 s.h.

The purpose of the course is to study the current theories and practices of teaching speech reading and auditory comprehension to hard-of-hearing children and adults. The educational problems of helping the student to gain proficiency in speech reading as a receptive language process are discussed. Principles of auditory training are studied as a means to help develop the use of residual hearing. Emphasis is placed on the ways in which speech reading and auditory comprehension supplement each other in the rehabilitation of the hard-of-hearing individual. Practical consideration is given to the preparation of lessons for the acoustically impaired at all grade levels.

#### Speech 470. Argumentation and Debate

3 s.h.

A study is made in this course of the principles of argumentation including characteristics of propositions, definition of terms, logical organization, evidence, and oral argumentation techniques. Consideration is also given to the organization and coaching of school forensic programs. Practice and experience are afforded the student in argumentation and debate on current, significant issues.

#### Speech 471. Advanced Acting

2 s.h.

Through three areas of activitiy this course aims to broaden the student's appreciation of the art of acting and to increase his own acting skill. This is accomplished through individual study of established actors and schools of acting, through critiques of acting as observed by attending professional productions, and mainly through preparation of solo and group acting exercises, both original and from established dramatic literature. As far as possible, attention is paid to the student's future personal use of the material and exercises of the course. Prerequisite: Sp. 105B. or its equivalent, with a grade of "B" or better, or the permission of the instructor.

#### Speech 472. Voice Science

2 s.h.

Study of the scientific bases of the production of voice and articulations as a foundation for improvement in skill in speech.

## Speech 481A, 481B. Teaching Neurologically Impaired Children 2 s.h. each

A. Theory and methodology. Study of the causes and effects of neurological impairment in school age children. Emphasis will be on methods effective in helping children whose perceptual dysfunctioning interferes with development of communication and of learning. Demonstrations with neurologically impaired children will serve as the basis for study and discussion.

B. Demonstration and practice teaching. Student teaching, under supervision, of groups of children who have neurological impairments. Discussion and evaluation will follow each lesson. Parents of the children will take part in the conferences with the teachers. (Credit for whole course dependent upon completion of part B.)

## Speech 482. Stuttering

2 s.h.

Principles and methods of speech therapy with children who stutter. Methods of evaluation, specific techniques of speech therapy, and principles coordinating speech therapy with home and with school life will be the focus of this practical course. Demonstrations with children who stutter will serve as the basis for study and discussion.

# Speech 483A, 483B. Methods and Materials in Teaching Speech to Language Impaired Children—I and II 2 s.h. each

I. Nature and needs in helping language impaired children to develop concepts for expressing thoughts and needs. Special emphasis on mentally retarded children. Demonstrations with trainable and educable children, aphasic children, and schizophrenic children.

II. Methods, materials, and programs for teaching children with language impairments in a supervised and evaluated clinical practicum on campus.

#### Speech 484. Cleft Palate and Oral Deformities

2 s.h.

Study of etiology and characteristics of cleft palate and oral deformities or malfunctions in children. Emphasis on speech therapy and surgical repair procedures. Unit on tongue thrust therapy is also included.

## General Education Courses in Speech

The following courses may be chosen by matriculated students (other than Speech majors) to meet the requirements in General Education outside their specific area of specialization:

Speech 436, 437, 438, 440, 441, 448, 449, 462, 470, 550, 563 (with permission of instructor), 565.

## Workshop in Speech Correction (not for graduate credit)

The following courses are especially designed for students who wish to fulfill certification requirements to teach children with speech disorders or for graduate students needing to fulfill prerequisites for matriculation for the Master's degree in Speech. Specialized areas in the speech sciences are offered as a workshop with attndance required during all or part of the six-week summer session, depending upon the number of units elected. Speech 439A, 439B, 439C must be taken in sequence. (439D may be taken with 439C.)

## Speech 439A. Phonetics

2 s.h.

An intensive study is made of the manner and place of articulation of sounds heard in American English. Skill is developed in using the International Phonetic Alphabet to transcribe speech both prescriptively and descriptively, from live and recorded voices. Consideration is also given to the intonation and stress patterns of spoken English.

## Speech 439B. Anatomy and Physiology of the Auditory and Vocal Mechanisms

3 s.h.

The work of this course entails a detailed study of the larnyx and ear as they function in the production and reception of speech. Consideration is also given to the physics of sound and to the structure and functioning of the nervous system.

#### Speech 439C. Speech Pathology

2 s.h.

The purpose of this course is to present a comprehensive analysis of the major pathologies of articulation, voice, rhythm, and symbolization. The etiology and treatment of severe stuttering, aphasia, cerebral palsy, and the dysphonias are discussed.

#### Speech 439D. Practicum in Speech Correction

1 s.h.

#### Speech 439E. Advanced Practicum in Speech Correction

1 s.h.

Students are required to spend forty-five clock hours in the Speech and Hearing Center for each semester-hour of credit in order to gain experience in planning and carrying out programs in therapy with children who have speech and hearing problems. Written observation reports, lesson plans, and progress reports are required. Students also participate in staff conferences and meetings with parents of children enrolled for speech therapy. Practicum hours may also be arranged at local speech centers and hospital units. Prerequisite: A course in speech correction.

## Speech 439F. Voice Disorders

2 s.h.

The purpose of the course is to study selected disorders of voice production. Consideration is given to etiology, pathology, and therapy related to vocal nodules, contact ulcers, paralysis of the vocal cords, and other organic voice problems. Speech rehabilitation techniques for the laryngectomized and for persons with cleft palate conditions are also discussed. Prerequisite: Sp. 439B and C, or consent of the instructor.

#### Speech 439G. Speech Correction

2 s.h.

This course presents an introduction to the area of speech development and correction, with emphasis on voice and speech problems commonly found in children at the nursery, elementary, and secondary-school levels. Consideration is given to the following: (1) subject matter; (2) diagnostic, remedial, and evaluative techniques; (3) testing and practice materials. Demonstrations with children who have faulty patterns of speech or whose speech development has been retarded are provided. Opportunities are provided for students to serve as cadet teachers in the Speech and Hearing Center by generally assisting the therapists and by observing therapy with children who have speech disorders.

# THE NEW JERSEY STATE SCHOOL OF CONSERVATION

Director: DR. JOHN KIRK

The six State Colleges, the State Department of Education, and the State Department of Conservation and Economic Development jointly operate the New Jersey State School of Conservation at Lake Wapalanne in Stokes State Forest, Sussex County. Credit for the courses given at the New Jersey State School of Conservation may be applied toward the Master's degree at the New Jersey State Colleges, subject to the approval in advance by the institution concerned. Students are advised to check with their advisors relative to the application of these credits towards graduate degrees.

The following courses may be offered at the New Jersey State School of Conservation. For complete descriptions, please refer to the departmental writeups appearing in this bulletin. Special descriptive announcements may also be had by writing to the New Jersey State School of Conservation, Branchville, New Jersey.

#### FINE ARTS DEPARTMENT

Fine Arts 415. Designing in Native Materials Fine Arts 474. Arts and Crafts in Education

#### GEOGRAPHY DEPARTMENT

Geography 420. Field Geography and Conservation

#### INDUSTRIAL ARTS DEPARTMENT

Industrial Arts 442. Conservation of Basic Industrial Materials

#### EDUCATION DEPARTMENT

Education 440. Camping Education

Education 441. Conservation Education

Education 442. Practicum in Camp Leadership

Education 443. Practicum in Camping Education and Administration

Education 444. Practicum in Conservation Education Education 480. Field Science for Elementary Teachers

#### **HEALTH AND PHYSICAL EDUCATION DEPARTMENT**

Physical Education 410. Water Safety and First Aid

#### SCIENCE DEPARTMENT

Science 405. Field and Laboratory Studies in Science

Science 411. Problems in Field Studies in Science Science 412. Field Studies in Science: Biological

Science 413. Field Studies in Science: Physical

Science 414. Conservation of Plants and Animals Science 415. Conservation of Soil and Water

Science 419. Field Science and Conservation

Science 420. Water Supply and Conservation Problems

#### SOCIAL STUDIES DEPARTMENT

Social Studies 477. Rural Sociology

Social Studies 482. Conservation and Rural Economic Life

Social Studies 494. Social Studies and Conservation



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# GRADUATE DIVISION MONTCLAIR STATE COLLEGE Upper Montclair, N. J.

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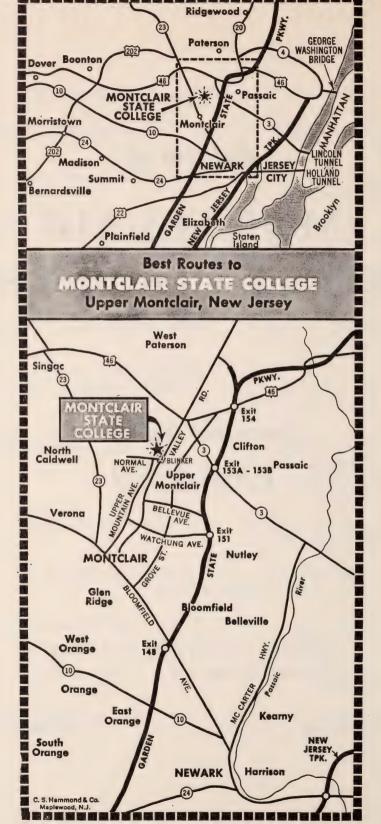
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# Bulletin of

# MONTCLAIR STATE COLLEGE

Graduate Division 1968-1969

MONTCLAIR STATE COLLEGE UPPER MONTCLAIR, N. J. 1968



# HOW TO GET TO MONTCLAIR STATE COLLEGE

#### Location

Montclair State College is located on Valley Road and Normal Avenue, Upper Montclair (turn at the blinker). The College is one mile south of the junction of Routes 3 and 46 on Valley Road.

# Directions for Reaching the College

From Bloomfield Avenue, Montclair Center (Sears' store) proceed north on Valley Road—three miles to the Normal Avenue blinker.

From Route 46 East, the landmark is West's Diner; take the next right, Valley Road—one mile to blinker at Normal Avenue.

From Route 46 West, the landmark is the junction with Route 3. Turn on Valley Road to Montclair, bear right on cloverleaf and proceed south under Route 46—one mile to blinker at Normal Avenue.

From the *Turnpike North* of Exit 10 or *South* from George Washington Bridge turn at Route 3 West or Route 46 West, then as above. From the *Turnpike South* of Exit 10, leave the Turnpike at Exit 10 and follow directions for Garden State Parkway North.

From Garden State Parkway North turn left at Exit 153B and proceed West on Route 3 to Valley Road.

From Garden State Parkway South turn at Route 46 West (Clifton Exit 154) thence to Valley Road. If you miss that turn, continue South to Exit 151, Watchung Avenue, thence West to Valley Road and North to blinker at Normal Avenue.

The #60 Public Service Bus from Newark to Montclair terminates at the South end of the campus.

The #76 Public Service Bus from Paterson to Orange stops at Valley Road and Normal Avenue.

The #66 DeCamp Bus from New York, which leaves on the half hour from Platform 73, Port Authority Bus Terminal, stops at Valley Road and Mt. Hebron Road—one long block from the campus.

The *Erie Railroad*, Montclair Heights Station, is at the Southwest corner of the campus.

WHEN IN DOUBT

Call

746-9500-Area Code 201

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# MONTCLAIR STATE COLLEGE

#### **CALENDAR 1968-69**

#### GRADUATE

#### Fall Semester 1968

September 9 and 10 Registration with late registration through

September 14.

September 12 Evening and Graduate Classes Begin

November 6 Mid-point of Semester

November 15 Last day to file for June, 1969, M.A.

degree conferment

November 25 through 30 Thanksgiving Recess

December 22 through

January 5 Christmas Recess
January 6 Classes Resume

January 18 Last Day of Classes—Fall Semester

### Spring Semester 1969

January 27 and 28 Registration with late registration through

February 1.

February 3 Evening and Graduate Classes Begin
March 12 M.A. Comprehensive Examination

7:00 P.M.—A & S, Bus. Ed., Dist. Ed., Fine Arts,

I.A., Speech, Stu. Per. Ser.

March 15 Last day to file for October, 1969, M.A.

degree conferment

M.A. Comprehensive Examinations—

9:00 A.M.—Eng., For. Lang., Math., Music., Phys. Ed., Psych., Reading, Social Sciences

March 29 Mid-point of Semester

March 30 through

April 7 Spring Recess
April 8 Classes Resume

May 26 Last Day of Classes—Spring Semester

June 1 Baccalaureate and Convocation

June 4 Commencement

# Periods for Filing Applications for Matriculation

Fall, 1968, or Spring 1969, Admission—June 15 through July 15, 1968

Spring, 1969, or Summer 1969, Admission—September 3 through November 15, 1968

Summer, 1969, or Fall 1969, Admission—January 3 through April 15, 1969

Fall, 1969, or Spring 1970, Admission-June 16 through July 16, 1969



Montclair State College is fully accredited by the Middle States Association of Colleges and Secondary Schools and a member of the American Association of Colleges of Teacher Education. Montclair State is also fully accredited by the National Council for Accreditation of Teacher Education for the preparation of Elementary and Secondary School Teachers and School Service Personnel, with the Master's Degree as the highest degree approved.

## BOARD OF TRUSTEES OF MONTCLAIR STATE COLLEGE

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Norman E. Lange, Ed.D.	Director of Student Teaching and Placement
Peter P. Stapay, Ed.M.	Registrar
John R. Beard, D.L.S.	Head Librarian
John R. Beard, D.L.S	
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Harold C. Bohn, Ed.D.  Daniel Brower, Ph.D.	Chairman, Department of English
Harold C. Bohn, Ed.D.  Daniel Brower, Ph.D.	Chairman, Department of English Chairman, Department of Psychology
Harold C. Bohn, Ed.D.  Daniel Brower, Ph.D.  Lillian C. Calcia, Ed.D.	Chairman, Department of English Chairman, Department of Psychology Chairman, Department of Fine Arts
Harold C. Bohn, Ed.D.  Daniel Brower, Ph.D.  Lillian C. Calcia, Ed.D.  Paul Clifford, A.M.	Chairman, Department of English Chairman, Department of Psychology Chairman, Department of Fine Arts Chairman, Department of Mathematics
Harold C. Bohn, Ed.D.  Daniel Brower, Ph.D.  Lillian C. Calcia, Ed.D.  Paul Clifford, A.M.  Philip S. Cohen, Ph.D.	Chairman, Department of English Chairman, Department of Psychology Chairman, Department of Fine Arts Chairman, Department of Mathematics Chairman, Department of Social Studies Chairman, Department of Industrial
Harold C. Bohn, Ed.D.  Daniel Brower, Ph.D.  Lillian C. Calcia, Ed.D.  Paul Clifford, A.M.  Philip S. Cohen, Ph.D.  Arthur W. Earl, Ed.D.	Chairman, Department of English Chairman, Department of Psychology Chairman, Department of Fine Arts Chairman, Department of Mathematics Chairman, Department of Social Studies Chairman, Department of Industrial Education and Technology
Harold C. Bohn, Ed.D.  Daniel Brower, Ph.D.  Lillian C. Calcia, Ed.D.  Paul Clifford, A.M.  Philip S. Cohen, Ph.D.  Arthur W. Earl, Ed.D.  L. Howard Fox, Ph.D.  M. Herbert Freeman, Ph.D.	Chairman, Department of English Chairman, Department of Psychology Chairman, Department of Fine Arts Chairman, Department of Mathematics Chairman, Department of Social Studies Chairman, Department of Industrial Education and Technology Chairman, Department of Speech
Harold C. Bohn, Ed.D.  Daniel Brower, Ph.D.  Lillian C. Calcia, Ed.D.  Paul Clifford, A.M.  Philip S. Cohen, Ph.D.  Arthur W. Earl, Ed.D.  L. Howard Fox, Ph.D.  M. Herbert Freeman, Ph.D.	Chairman, Department of English Chairman, Department of Psychology Chairman, Department of Fine Arts Chairman, Department of Mathematics Chairman, Department of Social Studies Chairman, Department of Industrial Education and Technology Chairman, Department of Speech Chairman, Department of Business Education Chairman, Department of Foreign Languages
Harold C. Bohn, Ed.D.  Daniel Brower, Ph.D.  Lillian C. Calcia, Ed.D.  Paul Clifford, A.M.  Philip S. Cohen, Ph.D.  Arthur W. Earl, Ed.D.  L. Howard Fox, Ph.D.  M. Herbert Freeman, Ph.D.  Paul A. Gaeng, Ph.D.  Irwin A. Gawley, Ed.D.  Katharine B. Hall, Ph.D.	Chairman, Department of English Chairman, Department of Psychology Chairman, Department of Fine Arts Chairman, Department of Mathematics Chairman, Department of Social Studies Chairman, Department of Industrial Education and Technology Chairman, Department of Speech Chairman, Department of Business Education Chairman, Department of Foreign Languages Chairman, Department of Science Chairman, Department of Home Economics
Harold C. Bohn, Ed.D.  Daniel Brower, Ph.D.  Lillian C. Calcia, Ed.D.  Paul Clifford, A.M.  Philip S. Cohen, Ph.D.  Arthur W. Earl, Ed.D.  L. Howard Fox, Ph.D.  M. Herbert Freeman, Ph.D.  Paul A. Gaeng, Ph.D.  Irwin A. Gawley, Ed.D.  Katharine B. Hall, Ph.D.  Ward Moore, Ed.D.	Chairman, Department of English Chairman, Department of Psychology Chairman, Department of Fine Arts Chairman, Department of Mathematics Chairman, Department of Social Studies Chairman, Department of Industrial Education and Technology Chairman, Department of Speech Chairman, Department of Business Education Chairman, Department of Foreign Languages Chairman, Department of Home Economics Chairman, Department of Home Economics Chairman, Department of Music
Harold C. Bohn, Ed.D.  Daniel Brower, Ph.D.  Lillian C. Calcia, Ed.D.  Paul Clifford, A.M.  Philip S. Cohen, Ph.D.  Arthur W. Earl, Ed.D.  L. Howard Fox, Ph.D.  M. Herbert Freeman, Ph.D.  Paul A. Gaeng, Ph.D.  Irwin A. Gawley, Ed.D.  Katharine B. Hall, Ph.D.  Ward Moore, Ed.D.	Chairman, Department of English Chairman, Department of Psychology Chairman, Department of Fine Arts Chairman, Department of Mathematics Chairman, Department of Social Studies Chairman, Department of Industrial Education and Technology Chairman, Department of Speech Chairman, Department of Business Education Chairman, Department of Foreign Languages Chairman, Department of Science Chairman, Department of Home Economics

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Thaddeus J. Sheft, A.M.	Audio-Visual	Education

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Allan Morehead Ed D	Dean of the College
Edward I Ambry Ph D	Associate Dean/Graduate:
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Hugh Allen, Jr., Ed.D.	Professor of Physics and Science Education
	Associate Professor of Sociology
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Richard J. Barker, Ph.D.	Professor of History
Joseph F. Becker, Ed.D.	Professor of History Professor of Chemistry
Laurence Bellagamba, Ed.D.	Professor of Education
William A. Bellare, A.M.	Associate Professor of Speech
	Professor of History
Carolyn E. Bock, Ph.H.	Professor of Latin
	Associate Professor of Geography
	Associate Professor of Education
	Chairman and Professor of Psychology
Martin Brown, Ed.D.	Associate Professor of Psychology
Edgar C. Bve, A.M.	Associate Professor of Social Science
	and Coordinator of Bureau of Field Studies
	Chairman and Professor of Fine Arts
	(on leave Fall Semester) Professor of Music
	Chairman and Professor of Mathematics
Alden C. Coder, Ed.D.	Professor of Physical Education
Philip S. Cohen, Ph.D.	Chairman and Professor of History
Frank M. Cordasco, Ed.D.	Professor of Education
William A. Cuff, M.A.	Associate Professor of Education
Gert L. Daniels, Ed.D.	Professor of Zoology and Biology
Earl C. Davis, Ph.D.	Professor of Psychology and Guidance
Arthur W. Earl, Ed.D.	Chairman and Professor of Industrial Education and Technology
Steven C. Earley, Ph.D. (on leav	Education and Technology e) Professor of English
Emma Fantone, A.M.	Associate Professor of Audio-Visual Education
Ernest B. Fincher, Ph.D. (on leave	ve) Professor of Political Science
Lois G. Floyd, Ph.D.	Professor of Psychology
	Chairman and Professor of Speech
	fessor of Industrial Education and Technology
M. Herbert Freeman, Ph.D.	Chairman and Professor of Business Education
Paul E. Froehlich, Ed.D.	Professor of Business Education
Joan E. Gaeng, M.A.	Professor of Business Education Associate Professor of Education
Paul A. Gaeng, Ph.D.	Chairman and Professor of Foreign Languages
Vladimir L. Garik, Ph.D.	Associate Professor of Chemistry
Dorothy Garland, M.A.	Associate Professor of Psychology
Irwin H. Gawley, Jr., Ed.D.	Chairman and Professor of Science
Abraham Gelfond, Ph.D.	Professor of Psychology

# FACULTY OF THE GRADUATE DIVISION (Continued)

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Donald R Gregg M A.	Associate Professor of Education
Howard I Hass Ed D	Professor of Business Education
Ronald Haas Ed D	Associate Professor of Psychology and Education
Lawrence Hamel Ph D	Associate Professor of Psychology and Education
	Associate Professor of English
	Professor of Psychology
Joseph C Hecht Ed D.	Professor of Distributive Education
George D. Heiss Ed D	Associate Professor of Education
George A Horn Ed D As	sociate Professor of Health and Physical Education
Gilbert O Hourtoule Ph D	Professor of Political Science
Gilbert Kahn Ed D.	Professor of Business Education
Abraham Kampf Ph.D.	Associate Professor of Fine Arts
Fllen Kaufiman M A	Associate Professor of Speech
	Associate Professor of Education
Leah K. Koditschek, Ph.D.	Associate Professor of Bacteriology
William G. Koellner, M.A.	Associate Professor of Mathematics
	Associate Professor of History and
Traiter E. Hopo, III.	Social Science Education
Stephen Kowalski, Ph.D.	Social Science Education Associate Professor of Science
	Professor of English
Sidney J. Kronish, Ph.D.	Professor of Economics and Director
	of N. J. Center for Economic Education
	Associate Professor of Psychology
	Professor of Biology
	Associate Professor of Psychology
	Professor of Speech
	Associate Professor of German
	Associate Professor of Fine Arts
	Professor of Mathematics
	Associate Professor of Fine Arts
	Professor of Biology
	Professor of Speech
	Associate Professor of Psychology
	Professor of Education
	Associate Professor of Speech
	Chairman and Professor of Music
	Associate Professor of History
	Professor of Music
	Professor of Education
	Professor of Business Education
	Professor of Education
	Professor of English
George P. Placek, A.M.	Associate Professor of Chemistry
Bertha B. Quintana, Ed.D	Professor of Anthropology

# FACULTY OF THE GRADUATE DIVISION (Continued)

Sanford R. Radner, Ed.D.	Professor of English
Robert C. Ramsdell, M.A.	Associate Professor of Science
John G. Redd, Ph.D.	Professor of Health and Physical Education
Maynard L. Rich, M.S.	Associate Professor of Psychology
	Associate Professor of Spanish
John P. Roberts, M.A.	Associate Professor of English
Louis J. Roederer, M.A.	Associate Professor of Foreign Languages
Helen A. Royer, Ph.D.	Associate Professor of History
Charity E. Runden, Ph.D.	Professor of Psychology and Education
George Salt, M.A.	Associate Professor of Education
Joan Schleede, Ed.D. Associ	iate Professor of Health and Physical Education
Henry E. Schmidt, M.A Assoc	iate Professor of Health and Physical Education
Harold M. Scholl, Ed.D.	Professor of Speech
Jerome M. Seidman, Ph.D.	Professor of Psychology and Education
Abbie F. Shapiro, Ed.D.	Associate Professor of Psychology
	Associate Professor of Education
Max A. Sobel, Ph.D.	Professor of Mathematics
Lillian Szklarcyzk, Ph.D.	Associate Professor of French
	Chairman and Professor of Physical Education
Ralph A. Vernacchia, M.A.	Associate Professor of Fine Arts
Hazel M. Wacker, Ed.D.	Professor of Health and Physical Education
	nan and Professor of Psychology and Education
	Associate Professor of Mathematics
	Professor of Music
Robert B. Williams, Ed.D.	Associate Professor of Education
Vernon B. Williams, M.A.	Associate Professor of Mathematics
Louis E. Zerbe, M. Mus.	

# GENERAL INFORMATION

# Philosophy and History of the Graduate Division

For nearly sixty years, Montclair State College has endeavored to service the basic needs of education: recruiting a scholarly, dedicated faculty; selecting earnest students of high academic standing; devising and operating as full and thorough a curriculum as possible; providing extra-curricular experiences to extend and enrich the cultural horizon of the College community; keeping alert for opportunities to make the educational process increasingly effective; and emphasizing the importance of the individual in an expanding society.

In 1908 Montclair State College began its teacher-education program as a two-year normal school. In 1927, by action of the State Board of Education, it was changed to a State Teacher College with four-year curricula leading to a Bachelor of Arts degree and certification to teach in the secondary schools of the State. Extension courses were instituted in 1929, and summer sessions in 1930, to enable teachers who held only a diploma and a teacher's certificate to obtain a Bachelor's degree.

The State Board of Education authorized, in June, 1932, the establishment of appropriate graduate programs leading to the Master of Arts degree, which the College was empowered to grant. Graduate studies were first offered in the summer of 1932 and have been continued in all regular and summer sessions since that time.

In 1937, the Middle States Association reviewed and accredited the graduate program and has since done so regularly, as has the American Association of Colleges for Teacher Education, whose function has been assumed by the National Council for the Accreditation of Teacher Education. In 1948, the Graduate Committee was formed as a sub-committee of the Administrative Council to coordinate the graduate work of the various departments participating in it and to establish policies and standards appropriate to Master's degree programs. Since 1956, this Committee, under the title of Graduate Council, has assumed greater responsibility for the conduct of graduate work, On July 1, 1958, by action of the State Board of Education, the name of the College was changed to Montclair State College. Its function, however, continued to be that of a professional school devoted primarily to serving the interests of secondary education in this state until July 1, 1966, when the College became multi-purpose. On July 1, 1967 control of the College was relinquished by the State Board of Education. A newly established Board of Higher Education was assigned the responsibility for planning and coordinating higher education in the State of New Jersey.

The last decade has witnessed a rapid but orderly expansion of the entire College. In keeping pace with both the educational needs of New Jersey and increasing student enrollments the Graduate Division has expanded to include twenty-four different curricula leading to the Master of Arts degree. The Graduate Division traditionally has been concerned with meeting the needs of the secondary schools. However, in recent years the Graduate Division is becoming more multi-purpose. Programs without professional education requirements have been added and New Jersey Teaching Certification is no longer required for admission to most programs.

# Professional and Academic Status of the College

#### ACCREDITATION AND MEMBERSHIPS

Montclair State College is a fully accredited member of the Middle States Association of Colleges and Secondary Schools. In addition, the National Council for the Accreditation of Teacher Education has granted it full accreditation for the preparation of elementary and secondary school teachers, and school service personnel, with the Master's degree as the highest degree approved. Credits are exchangeable among colleges and universities which are members of regional and national associations to the extent to which the degree requirements of individual institutions permit the acceptance of transfer credit.

The College holds memberships in the American Association of Colleges for Teacher Education, the American Council on Education, The Association of State Colleges and Universities, and the New Jersey Association of Colleges and Universities. Female graduates of the College are accepted for membership in the American Association of University Women.

# The College Library

The Harry A. Sprague Library is an attractive modern, air-conditioned building located centrally on the campus. Students and faculty are encouraged to use its comfortable facilities which include study tables, individual study desks, group conference rooms, faculty carrels and inviting lounge areas. Smoking lounges are provided on the ground floor where also is located a typing room for student use.

A knowledgeable staff of librarians is on hand to guide students to the use of the Library's substantial collection of books and periodicals which is constantly expanding. Liberal lending regulations are designed to facilitate the students' access to this collection. A Xerox copying machine is available at nominal cost to those who wish to eliminate tedious note taking from printed materials in the Library. Periodicals, books and documents in microtext are accessible through the Library's microfilm, microfiche and microcard readers.

The general resources of the Library are augmented by a Curriculum Laboratory, a rapidly growing collection of United States and New Jersey government publications and special collections that include the China Institute Library, a New Jersey collection and four important poetry collections for special research.

# Master's Degree Specialization Areas

In addition to the major in Teaching, graduate work is offered in the following major areas: Administration and Supervision, Business Education, Distributive Education, English, Fine Arts, Foreign Languages (French and Spanish), Health Education, Home Economics, Industrial Education and Technology, Mathematics, Music, Outdoor Education and Conservation, Physical Education, Psychology, Pure and Applied Mathematics, Reading, Science, Social Sciences, Speech Arts, Speech Therapy, and Student Personnel Services, including School Social Work (Visiting Teacher).

# The Administration of the Master's Degree Programs

In the organization of the College, the Graduate Council consists of faculty representatives for each of the Master's degree programs offered by the various departments and those administrative officials of the College closely associated with graduate studies who are *ex officio*. Representatives on the Council are appointed by the President of the College, upon the recommendation of the Dean of the College and the department chairmen.

The Council's chief function is to recommend basic standards, policies, and procedures which govern the granting of Master's degrees, to develop new programs, and to engage in a continuous evaluation of all Master's degree work.

Graduate program policies and procedures are administered by the Associate Dean for Graduate Studies in cooperation with the various Master's degree program advisors and the Dean of the College, who supervises the activities of the Graduate Division and is responsible to the President of the College.

# Faculty

Faculty members serving the Graduate Division are with few exceptions members of the full-time staff of the College. Those who have attained the rank of associate professor or higher, or have an earned doctorate, are eligible for appointment to the faculty of the Graduate Division. The faculty of the Graduate Division is not restricted to Graduate instruction. Graduate courses may constitute only a part of the regular schedule of the faculty of the Graduate Division.

#### **Graduate Students**

The courses and programs are offered to serve the interests of five specific groups of students:

- Group I Those who wish to matriculate for the Master of Arts degree: persons who hold a Bachelor's degree from an accredited college or university, have a high scholastic average, and are interested in professional and personal growth.
- Group II Those in-service teachers who wish to matriculate for the Master of Arts degree: teachers who hold a bachelor's degree in one of the following areas: Administration or Student Personnel Services, or Reading, Speech Arts, and Speech Therapy. Also, in-service teachers who hold a Bachelor's degree and wish to obtain a Master of Arts degree in one of the subject matter fields in order to improve professional and personal growth.
- Group III Those who wish to matriculate for the Master of Arts in Teaching: persons who hold a Bachelor's degree from an accredited college or university, have a high scholastic average, and plan to pursue certification to teach in New Jersey secondary schools or in certain subject matter fields.
- Group IV Those who do not wish to matriculate for the Master of Arts degree: persons who hold a Bachelor's degree and
  - 1) wish to continue their professional preparation, or
  - 2) wish to take courses leading toward initial certification, or advanced certification, or
  - 3) are matriculated for advanced degrees at other institutions and plan to transfer credits, or
  - wish to take courses for cultural purposes without reference to credit
- Group V Senior-graduate students (Montclair State College seniors only) who are currently enrolled in the College who have good academic records (2.67 or better) and who are within sixteen semester hours of graduation may be permitted to take a maximum of eight semester hours of senior-graduate work (courses numbered 400-499) concurrently with any remaining semester hours to meet the requirements of the Bachelor's degree and prior to graduation. Applicants should obtain the appropriate application form from the Evening Division Office. These applications are then presented to the Registrar, the chairman of the department concerned, the Associate Dean/Graduate. Students should then register for this special work in the office of

the Director of the Evening Division. The student must pay all fees and tuition at the full graduate rate per semester hour, This does not constitute application for the Master's degree. (See Admission Procedures for Last Semester Seniors, page 17.)

# Admission and Matriculation for the Master's Degree

- 1. The applicant for admission to any of the Master's degree programs should be a graduate of an accredited college or university and must present evidence of his qualifications for advanced study as shown by a high scholastic record. The College requires an applicant with a doubtful undergraduate record or a Bachelor's degree from a non-accredited institution to take the Graduate Record Examination to determine his acceptability for matriculation in the Master's degree programs.
- 2. It is in the student's own interest that he determine his eligibility for matriculation before initiating a program of graduate study. However, his formal matriculation (i.e., official acceptance in writing by the Graduate Office in a program leading to the Master's degree) may be deferred for good reason until no more than eight semester hours of graduate credit have been earned.
- 3. Prior to admission and matriculation, each student indicates the Master's degree area in which he will complete such courses as are prescribed. Upon his formal acceptance, an official work program is made out in conference with a departmental advisor appointed for this purpose.
- 4. To be eligible for matriculation in a major subject area, a student must present evidence, in the form of an official undergraduate transcript, of work in the undergraduate major as indicated in the departmental statements describing the various programs.
- 5. To be eligible for matriculation in the several professional education programs in the Department of Education, except the major in Teaching, it is required that a student be certified to teach in New Jersey and have some successful teaching experience. Two full years of experience in grades 7-12 are required for acceptance into the program in Administration and Supervision, and one full year of teaching is required for acceptance into the Student Personnel Service major. One year of social work may be substituted in the School Social Work program of the Student Personnel Services.
- 6. To be eligible for matriculation in the Department of Psychology no teaching experience is necessary. However, for certification as a school psychologist one year of teaching experience and a New Jersey teacher's certificate is required.

# Steps in the Matriculation Process

- 1. The applicant secures from the Graduate Office an application form which must be completed and returned to that office together with a) a personal statement of his objectives as required on the application form; b) a check or money order for the required application fee; and c) a photocopy of his teaching certificate where applicable.
- 2. The applicant will have his college send official transcripts of all college credits (if the applicant is not a graduate of Montclair) to the Associate Dean/Graduate. The completed application, fee, and official transcripts should be on file in the Graduate Office before the dates listed on the College Calendar. (See page 6)
- 3. A review of the student's undergraduate record and other qualifications will be made in the Graduate Office. The applicant will then be notified as to what action has been taken on his application.
- 4. The applicant who meets admission requirements will next confer with the graduate advisor in the program in which he expects to do his work. When he is eligible for matriculation, the advisor will develop a formal program of courses with him.
- 5. A final conference with the Associate Dean/Graduate may be arranged, if necessary. Following this, the applicant will be advised in writing of the decision of the Graduate Council, and, if accepted, he will be furnished with a statement of the course of study (Official Work program) to be completed within a six-year period.
- 6. A final recommendation on all applicants is made by the Graduate Council. For good reason, legitimate adjustments may be made at any time in the student's original program, with the approval of his program advisor and confirmation of this action by the Associate Dean/Graduate. (Amendments of this nature are made on an appropriate form available in the Graduate Office.)
- 7. Under no circumstances shall a student be considered matriculated in a degree program until he receives from the Graduate Office an official matriculation letter signed by the Associate Dean/Graduate.

# Steps in Admission Procedures for Last Semester Seniors

Last semester seniors attending an accredited college or university
with a high scholastic record may make application to the Graduate
Division. If the applicant meets all the requirements for admission
except the Bachelor's degree, he will be placed in a pre-matriculated
status pending receipt of his degree and maintenance of the admission standards.

- 2. The applicant secures from the Graduate Office an application form which must be completed and returned to that office together with a) a personal statement of his objectives as required on the application form; b) a check or money order for the required application.
- 3. A review of the student's undergraduate record and other qualifications will be made in the Graduate Office. The applicant will then be notified as to what action has been taken on his application.
- 4. The applicant who meets admission requirements will next confer with the graduate advisor in the program in which he expects to do his work. When he is eligible for matriculation, the advisor will develop a formal program of courses with him.
- 5. The applicant who meets admission requirements will be placed in a pre-matriculated status. Upon conferment of the degree it is the responsibility of the applicant to send another official transcript of all undergraduate work completed. If the applicant has maintained the admission requirements of the Graduate Division he will receive a letter to confer with the graduate advisor in the program in which he expects to do his work. When he is eligible for matriculation, the advisor will develop a formal program of courses with him.

# Types of Admission in the Degree Programs

- 1. Regular Admission for applicants eligible to be fully matriculated.
- 2. Conditional (granted because specific undergraduate course deficiencies exist, or for other reasons).
- 3. Senior students in their last semester applying for admission prior to receiving their undergraduate degree.

#### Procedure for the Admission of Veterans

Veterans seeking admission to the Graduate Division should apply well in advance of the registration dates for a certificate of eligibility and entitlement at the Newark, New Jersey office (20 Washington Place) of the Veterans Administration. In requesting this certificate, the veteran is advised to indicate clearly his educational objective. The Veterans Administration has established certain limitations, especially with regard to change of course. In order that a veteran may be assured that his certificate is in order and that he has taken the proper steps to expedite his training, under the G. I. Bill, he should report at registration time to the Veterans' Counselor whose office is located in College Hall.

# Master's Degree Program Pattern (all majors except Education, Psychology, and Pure and Applied Mathematics)\*

The curriculum pattern for each of the Master's degree programs includes experiences in three areas: 1) Basic professional education 2) subject matter specialization; 3) free electives.

I. Basic Professional Education—This portion of the graduate program is devoted to developing the general professional consciousness as well as the competence of each student. This is accomplished by studies necessary for all teachers—regardless of their field of specialization—relating to the profession as a whole as it relates to children and the society in which it functions. Students must select courses from the following list to satisfy the Basic Professional Education requirement.

Required of all M.A. candidates:				
Ed. 503	Methods and Instruments of Research	2	s.h.	
Suggested electives in this area are as follows:				
Graduate Cour	rses:			
Ed. 500 Ed. 514 Ed. 550	School Law		s.h.	
Ed. 560	School Students Advanced Educational Psychology		s.h.	
	Child and Adolescent Development		s.h.	
Ed. 562 Ed. 566	Principles of Mental Hygiene Psychology and Education of the Gifted		s.h.	
Senior-Graduate Courses:				
Ed. 406 Ed. 408			s.h.	
Ed. 453	Materials Social Psychology		s.h.	
Ed. 492	Comparative Education		s.h.	
Graduate and	Senior-Graduate Related Courses:			
A student each grou	may receive credit for only one course selecter.	d f	rom	
	Tests and Measurements in Secondary Education, or	2	s.h.	
Psycn. 491	Measurement and Evaluation in Teaching and Learning	3	s.h.	
* See Department Appouncement				

<sup>\*</sup> See Department Announcement

Ed. 565	Psychology and Education of the Socially and		
,	Emotionally Handicapped, or	3	s.h.
Ed. 564	Psychology and Education of the Physically		
	and Mentally Handicapped, or	3	s.h.
Psych. 452	Psychology and Education of the Handicapped	3	s.h.
Ed. 580	Principles of Guidance, or	2	s.h.
Ed. 451	Guidance for the Classroom Teacher	3	s.h.

Basic Professional Education Requirement: minimum 6 credits; maximum, 9 credits.

II. Specialization—A considerable portion of the graduate program in the various subject matter areas is devoted to increasing the student's competence as a teacher. Studies in this category include additional work in the content of his major and related fields, and in the utilization of this content in the public school curriculum.

It is important that each student have experience in the systematic acquisition, preparation, and analysis of information relevant to some problem in his field of specialization. The candidate is required to show competence in executing and reporting an independent research study, field experiment, master's thesis, or similar creative activity. Opportunity for this activity is provided in the specialization aspect of the student's program.

The student may choose to satisfy this requirement in one of two ways:

- 1. A written report of superior quality of an approved study—or equivalent creative production—in connection with one of the seminars in his program. The project will be directly related to the purposes of the program in which the student is enrolled, or
- 2. A formal research thesis carried on under the direction of a thesis advisor. Students wishing to complete a formal thesis will register and may earn four semester hours of credit for this activity.

Specialization Requirement: minimum, 11 credits; maximum, 20 credits.

III. Free Electives—The free electives should be selected in consultation with the advisor. Depending upon the student's background courses may be selected outside of the student's major to provide some broadening experience; or select courses in professional education enabling the student to work toward initial or advanced certification; or select courses within his major area providing greater depth in subject area. The student is allowed considerable

freedom in the selection of these electives. However, all prerequisites must be met for the elected courses.

Free Electives Requirement: minimum, 6 credits; maximum, 8 credits.

TOTAL MASTER OF ARTS ...... Minimum: 32 s.h.

#### Graduate Research and the Master's Thesis

Courses and seminars will introduce the student to research methods in the several disciplines and indicate what and where are the basic sources of information. They will require him to survey the professional literature of his major. An advanced study, essay, research report is required in all the Master's degree programs by means of the departments' seminars.

Creative work, or distinguished performance involving intellectual as well as technical mastery, may be substituted in the programs in the arts, music, or literature. The essential element in this type of experience is independent work in depth by the student. Whether or not it is carried out in connection with course requirements is immaterial if the investigation conducted under faculty supervision requires the student to work independently on his own and to demonstrate his capacity to find, assess, organize, treat, and interpret the materials in a scholarly manner.

### The Master's Thesis

A department may accept The Master's Thesis as equivalent to the required seminar, and/or in lieu of all or part of the final comprehensive examination. A student writing a thesis must receive the approval of his departmental advisor and the Associate Dean/Graduate, and must register for the course, Departmental 600, Master's Thesis, for four semester hours. Information which will aid students submitting a Master's thesis is available in the Graduate Office.

The student is expected to complete the thesis within one calendar year. An extension of time may be granted by the Associate Dean/Graduate, after consultation with the student's advisor. If granted, the student must re-register for Departmental 600 on a no-credit basis and pay a fee for two semester hours. This extension will be for six calendar months. The thesis must be submitted six weeks prior to commencement.

#### **Certification Students**

Students holding Bachelor's degrees from the other colleges who plan to take courses leading to certification for secondary school teaching should:

- 1. Follow the procedure outlined under the section SPECIAL PROGRAMS WITH A MAJOR IN TEACHING.
- 2. Direct questions regarding certification to the Certification Advisor at the College; pre-registration advisement, by appointment, is recommended.
- 3. Consult Evening Division and Summer Session announcements for further information.

# Certification and the Master's Degree (all majors except Teaching, Pure and Applied Mathematics, Psychology, and School Social Worker Program)

Students who are interested in correlating their work for certification with some work toward the Master's degree should arrange an advisement interview with the College Certification Advisor.

# Certification Students and Student Teaching

Graduates of other colleges who wish to do their student teaching through Montclair State College should obtain a statement from the Director of Student Teaching and Placement outlining the conditions under which it can be done. This group will be expected to meet the standards established for Montclair State College students before being assigned for student teaching. At least 10 s.h. of work at Montclair State College must be completed before enrolling for supervised student teaching.

Students who desire to meet the State requirement in supervised student teaching must be approved by the Director of Student Teaching, after which approval they will register for this course.

# Special Programs with a Major in Teaching

These Certificate and Master's degree programs are designed especially for college graduates who wish to prepare to become secondary school teachers, or teachers of subjects such as art and music in the elementary and secondary grades. The content, organization, materials, and methods of these courses are designed with the consideration of the student's maturity, academic background, and experience.

# Admission to Certificate\* or Master's Degree in Teaching Programs

Admission is restricted to those selected graduates of accredited colleges who indicate high potential for teaching, and to in-service teachers with emergency or provisional certificates.

<sup>\*</sup>Students who successfully complete the Certificate Program will be recommended for appropriate New Jersey teacher certificates.

College graduates not employed as teachers will be screened for admission with due consideration to:

- a. Suitability or character and personality for teaching
- b. Health examination
- c. Speech and writing competence
- d. Competence in teaching field, based upon undergraduate grades of B- or better (2.67 on a 4 point scale). Students who present lower grade point averages must also present scores earned on the Graduate Record Examination Aptitude Test.

In-service teachers holding emergency or provisional certificates, employed by local school districts, will be admitted to the program upon application, official acceptance into an approved certification or MAT program at Montclair State College, and agreement by the employing superintendent of schools to enter into a cooperative program of supervision of the student in connection with course Education 595E, 595F Supervised Teaching Seminar. During the first semester these students will complete the application procedure regarding character, health, speech, and writing, and preparation in subject-matter field. When the student completes six to ten semester hours at Montclair, a decision will be made regarding matriculation for the M.A. degree. If as a result of failure to satisfy the screening criteria or unsatisfactory performance in the program, it is considered necessary to withdraw a student, conferences will be arranged with the student and the employing superintendent as early as possible.

MASTER'S DEGREE PATTERN: MAJOR IN TEACHING SECONDARY (7-12) AND SPECIAL FIELD (K-12)

# (1) Basic Background Requirements

A student must have had a minimum of thirty graduate or undergraduate semester-hour credits in general background courses distributed in at least three of the following fields: English, Social Science, Science, Fine Arts, Mathematics, and Foreign Languages. Six semester-hour credits in English and six semester-hour credits in Social Studies will be required.

# (2) Subject-Matter Specialization Requirements

A student must have had a subject-matter background suitable in extent and coverage to constitute a teaching major in at least one field. Students whose subject-matter background is deficient will be required to remove the deficiencies prior to recommendation by the College for a teacher's certificate or Master's degree. Additional work that is needed may be taken at either the graduate or undergraduate level. Write to the Associate Dean/Graduate or certification advisors.

# (3) Professional Requirements

Students take the following courses (course descriptions and details may be found in the Education and Psychology Department sections of this catalog): Education 595A, 595B, 595C, 595D, 403 or 595E and 595F; Psychology 560, 561. Courses may be waived that have been completed at either the graduate or undergraduate level prior to enrollment in the program. However, no student will be recommended for a certificate or a Master's degree who has not completed Student Teaching or the Supervised Teaching Seminar at the College.

TOTAL PROFESSIONAL PROGRAM FOR CERTIFICATION 26 s.h.

# (4) Additional Courses for M.A. Degree

Required Courses

Education 595G and 595H 6 s.h.

Elective Courses 8 s.h.

Students may choose, with advisement, additional electives in general education or in the subject-matter specialization requirement.

Selected matriculated students may be invited to develop a Master's thesis under the guidance of a thesis advisor for which four semester hours of elective credit will be allowed.

TOTAL MASTER OF ARTS (Major in Teaching) ...... Minimum: 40 s.h. (Students must complete at least 32 semester hours of graduate work in the Montclair State College Program)

# Fees and Charges

**Tuition** 

New Jersey Residents	
and Non-Residents per semester hour of credit	\$25.00
Registration (non-refundable)	2.00
Late Registration (non-refundable)	5.00
Application for admission to a program	
(non-refundable)	5.00
Transcript (Inquire in Registrar's Office) each copy	1.00
Supervised Student Teaching (if required)	60.00
(This fee is in addition to the credit fees stated above	
Dormitory (including room, breakfast, lunch, and dinner	
for a summer session) per week	22.75
Change of Class Schedule Fee (see pg. 30)	5.00
All checks should be made payable to Montclair State	College.
All charges are payable during the registration period.	
These charges are subject to revision.	

## Refunding of Fees

In accordance with a decision of the State Board of Education on May 3, 1962, the following uniform schedule of refunds was effective in all New Jersey State Colleges on September 1, 1962:

Periods of Withdrawal for 1968-69	Per Cent Refunded
Withdrawal before course begins	100%
Withdrawal during first third of course— thru October 6th (Fall Semester) thru March 8th (Spring Semester)	
Withdrawal between first third and first half of course—thru November 6th (Fall Semester) thru March 29th (Spring Semester)	30%
Withdrawal during last half of course	None
The percentage of refund is based upon the total obligati	on.

IN COMPUTING REFUNDS; THE DATE OF WITHDRAWAL IS THE DATE ON WHICH THE EVENING DIVISION OFFICE RE-CEIVES A WRITTEN NOTICE FROM THE STUDENT.

# Requirements, Policies, and Procedures

Questions pertaining to any of the following should be addressed to the Associate Dean/Graduate.

# (1) Application for Final Evaluation

The application form is obtained in the Evening Division Office by the degree candidate anticipating the completion of the degree requirements. This form must be completed and returned before:

March 15 for students completing requirements by the following August.

June 1 for students completing requirements by the following January.

November 15 for students completing requirements by the following June.

# (2) Attendance at Commencement

Following completion of requirements for the degree attendance is required at the June commencement unless excused by the Dean of the College.

# (3) Basic Professional Education

Education 503, Methods and Instruments of Research, when re-

quired in the program, must be taken at Montclair State College. The Major in Teaching program requires a three semester-hour research course, Education 595G, "Action" Research for Teachers, and must be taken in residence.

# (4) Change of Courses

No student will be permitted to change his scheduled courses without the approval of his advisor and the Associate Dean/Graduate. Such changes must be made prior to the second meeting of the course. To change from "auditor" to "credit," or vice versa, a student must make formal application not later than the mid-point in the semester. Forms are available in the Evening Division Office.

# (5) Comprehensive Examination

A comprehensive departmental examination or its equivalent is required in all departments. This examination may be written and/or oral. The oral phase of the examination will be on an individual basis. The examination is given during the Spring semester, prior to graduation, by the department in which the student does his major work. Students who fail the departmental comprehensive examination are permitted to retake this examination after a period of one year has elapsed. Students may be required to register for additional work in preparation for the re-examination. Students may not take the examination more than three times. (Consult the Evening Division Announcements for dates on calendar page.) It is the student's responsibility to notify his advisor that he intends to take the examination. This procedure should be completed at least 6 weeks prior to the examination date in order to allow ample time for the department to communicate with each candidate concerning any pre-examination procedures.

# (6) Course Numbering System

Courses in the 500 and 600 series are open only to graduate students. Those in the 400-499 series and listed in this bulletin may be selected by graduate students for graduate credit. Students must have completed the prerequisites indicated in the course descriptions.

# (7) Course Offerings and Schedules

Regular bulletins are published by the Evening Division for the information of those who wish to attend part-time, extension, or summer session courses. These contain a list of course-offerings, time of class meetings, room assignments, and instructors for the scheduled classes. Other information may be obtained from the Associate Dean/Graduate, Montclair State College, Upper Montclair, New Jersey.

# (8) Departmental Seminar

Each candidate must complete an approved seminar in the department of his major subject. Education 503, Methods and Instruments of Research, is a prerequisite for this required seminar.

# (9) Change of Major

A student desiring to change major obtains a *Change of Major Form* from the Graduate Office. This form is to be signed by the present major advisor, the new major advisor and the Associate Dean/Graduate. Once approved, a new official work program is made out. The student is cautioned that *all* previous course work frequently cannot be transferred to the new program.

## (10) Grades to be maintained

An average grade of "B" or better is required for the obtaining of the Master's degree. No graduate credit is given for work below "C."

# (11) Grading System

Marks indicating degrees of achievement in the various courses are given in letters A, B, C, D, and F.

A-Excellent

B-Good

C-Fair

D—Poor (No "D" credit may be counted toward the Master's degree)

F-Failure

In.—Incomplete Work\*

WP-Withdrawn, passing

WF-Withdrawn, failing

# (12) Graduate Level Courses

The majority of the courses taken or credits earned should be on the 500-600 level.

# (13) Master's Degree Credit

The responsibility of taking the right courses for the program being pursued rests with each student. It is important that at each registration period the student bring his official work program, together with his transcripts of graduate work taken at this College, so as to avoid taking courses that cannot be counted toward the degree.

<sup>\*</sup>Where a student has had an unavoidable absence, or presents other good reasons in accord with approved policy, a course may be marked "Incomplete" at the end of a semester or summer session. This mark must be removed by a final grade, or the course cannot be credited and the mark becomes "F" automatically. Incomplete grades assigned during the spring semester or summer session must be cleared before November 15. Fall semester incomplete grades must be cleared before April 15,

## (14) Number of Semester Hours: Minimum

A minimum of thirty-two semester hours of graduate credit is required in all departments. Additional hours may be added to compensate for any deficiencies found in the applicant's undergraduate record. A minimum of forty semester hours is required in the program with a major in teaching. A minimum of sixty semester hours is required for certification in the School Psychology Program.

# (15) Residence Requirements

- a. A minimum of thirty-two semester hours of graduate work in residence is required except as noted in item 22.
- b. The student must attend the College as a full-time graduate student for at least one summer session (six semester hours), or one regular semester (twelve semester hours) to meet the residence requirements.

Fully employed teachers are encouraged to restrict the graduate work carried during the year, and to take advantage of the course offerings in the summer session when their normal professional responsibilities will not interfere with the study expected of advanced students.

# (16) Restrictions for Graduate Program Credit

- a. No credit is granted toward the Master's degree for certain specifically designated basic courses on the 400 level which are required for initial certification.
- b. No credit is granted toward the Master's degree for courses taken more than ten years prior to the date on which the student will receive his degree.
- c. No more than eight semester-hours of graduate credit taken at Montclair prior to matriculation, or more than six semester hours of graduate credit offered by Montclair in extension (off-campus courses), may be credited toward the Master's degree.
- d. No graduate credit is granted retroactively for work taken in excess of undergraduate degree requirements.
- e. No graduate credit is allowed for concurrent registration (enrollment) in other colleges without the approval of the Associate Dean/Graduate.
- f. No graduate credit is granted for courses in which a student has been an auditor.
- g. Since some course numbers and/or titles have been changed, responsibility for avoiding duplication is placed upon the student. No course once taken for credit may receive credit a second time under another number and/or title.

## (17) Retention Standard

The Associate Dean/Graduate and the student's Program Advisor may, for good reason, recommend to the Dean of the College the revocation of matriculated status of any one who is found deficient in personality, integrity, temperament, emotional adjustment, or physical stamina, or after it has been established that there is evidence of serious unprofessional conduct.

A student who does not maintain an acceptable standard of scholarship (an average of "B" or better) will be placed on probation. If it then becomes apparent that he is unlikely to achieve an acceptable standard, he will lose his status as a matriculated student.

# (18) Student Load

Graduate work should involve careful and intensive study with ample time to explore areas which may warrant study. Twelve to sixteen hours of work per semester is considered a full-time program for the graduate student in residence.

For teachers, or others employed full time, six hours of work in any one semester shall be the maximum load, with four semester hours recommended. In the regular six-week summer session, the maximum load shall be eight semester hours. However, the Graduate Council strongly recommends that the student consider six semester hours of work a full program.

# (19) Thesis

Four of the total credits can be satisfied by a thesis which meets the approval of the Graduate Council. In some departments the thesis may be offered in place of the written comprehensive examination, and/or the oral examination.

# (20) Time Limit

Work for the Master's degree must be completed within six years after the date of matriculation. If an extension of time is required, a request for such extension must be filed with the Associate Dean/Graduate. The student's progress will then be reviewed and evaluated in accordance with the requirements for the degree as stated in the most recent Graduate Bulletin and with the established policy for this type of continuance. The policy statement may be obtained from the Graduate Office.

# (21) Transfer Credit

With the approval of the student's program advisor and the Associate Dean/Graduate, a graduate of an accredited college or university may transfer graduate credits. The maximum amount of credit which may be accepted is eight semester hours. The procedure is to arrange in advance for this privilege, and to make

application for transfer of credit on a form available in the Graduate Office. Credit for courses taken prior to 1959 may not be transferred.

# (22) Withdrawal from a Course

A written notice filed in the office of the Evening Division is required. (Refunds are computed from the date of receipt of such written notice.) Students who do not submit a written notice will receive the mark of "F" in those courses which they cease to attend. Non-attendance at classes or oral or written notification to the instructor does not constitute a formal withdrawal.

Students who withdraw after the mid-point in the semester will receive an automatic grade of "F", except with approval of the Dean of the College in certain very exceptional cases.

# (23) Change of Class Schedule Fee

A \$5.00 fee is charged to students who, after their *initial* regisstration each semester, desire to make *any* change in their original class schedule other than a withdrawal from a class.

#### SERVICES

ACADEMIC ADVISORS: Appointments with the Graduate Advisors, the Associate Dean/Graduate, or the Director of the Evening Division may be made by mail or telephone. Appointments should be made as early as possible prior to the end of the current semester. Advisors are available during hours of registration.

AUDIO-VISUAL CENTER. The Center provides audio-visual materials, equipment, and services for use by faculty and students for classroom instruction and presentation. The staff of the Center is available for special consultation on audio-visual problems, for demonstrations of audio-visual materials and methods and for special teaching and training in the area of audio-visual education. The Center handles the scheduling of all films for the College, as well as their ordering, mailing, and rental. Student assistants are provided whenever the use of equipment is requested.

BOOKSTORE: The bookstore is located adjacent to the main lobby in the Student Life Building. This on-campus facility will be open during all hours of registration and evenings during the first two meetings of each class until 8:00 p.m. Thereafter, regular hours of 8:30 a.m. to 4:30 p.m. will be in effect.

Saturday hours during the Fall and Spring semesters are 8:00-11:00 a.m. when Evening Division classes are in session.

Books will be available for purchase one week before in person registration for the benefit of those graduates registering by mail.

HEALTH SERVICE: There is a registered nurse on duty in the College Health office. This office is located in the west wing of Russ Hall. Emergency medical care is available. Although regular office hours are from 8 a.m. until 4 p.m., evening services are available from 4 p.m. to 8 a.m. Between 10 p.m. and 7:45 a.m. the student must phone first to gain admittance. Phone 746-9500.

SNACK BAR: Located in Student Life Building. Open Monday thru Thursday until 9:00 p.m. and Saturdays from 8:00 a.m. until 12 noon.

LIBRARY: The main floor of the Harry A. Sprague Library includes the circulation desk, the technical processes area and the reference and bibliography collection. Here also are the periodical titles for the first part of the alphabet, A-G, and books classified from 000 to 399 (General Works, Philosophy, Religion, and Social Sciences, including Education). A Xerox machine makes possible copying (for 10¢ per exposure) any printed material.

The second floor includes periodical titles for the remainder of the alphabet, H-Z, and books classified from 400 to 999 (Philology, Pure and Applied Sciences, the Arts, Literature, and History).

A curriculum laboratory and special collections occupy separate rooms on the second floor. The special collections include the China Institute Library, a New Jersey collection, the Sullivan and the Webster Modern Poetry Collections, and the College Archives.

On the lower level of the library there are a reserve book room, a typing room with coin-operated typewriters, lounges and storage area.

# DEPARTMENT OF BUSINESS STUDIES

Graduate Advisors: Dr. Louis C. Nanassy—Business Education
Dr. Joseph C. Hecht—Distributive Education

The graduate work in the Department of Business Studies is designed to prepare teachers of business education for administrative, supervisory, specialized work, or master teaching in the field of business education and distributive education. In order to attain these objectives the candidate has an opportunity to supplement his undergraduate program and to explore advanced areas of work in accordance with his individual background, experience, achievement, and professional needs.

Graduate work toward the Master of Arts degree in Business Education presupposes the completion of an undergraduate major in business or distributive education, or its equivalent.

All candidates for the Master of Arts degree in Business Education must pass a comprehensive oral and written examination before they are granted the degree. This examination is given in the Spring Semester for those candidates anticipating graduation in June or September. It is general in nature and is intended to test the candidate's maturity of thought with respect to business and distributive education.

#### **Business Education**

## REQUIREMENTS FOR THE M.A. DEGREE IN BUSINESS EDUCATION

I.	Basic Professio	nal Education (see Master's Degree Program Pattern) 6-9	s.h
II.	Specialization	11-20	s.h
	A. Required C	ourses	
	B.E. 501.	Principles and Problems of Business Education 2	s.h
	B.E. 502.	Evaluation of Current Literature in Business Education 2	s.h
	B.E. 603.	Research Seminar in Business Education	s.h
	Required, a	t least two of the following courses:	
	B.E. 511.	Improvement of Instruction in Bookkeeping, Accounting, and Business Arithmetic	s.h
	B.E. 512.	Improvement of Instruction in General Business Subjects 2	s.h
	B.E. 513.	Improvement of Instruction in Stenography and Secretarial Practice 2	s.h
	B.E. 514.		s.h.
	D.E. 551.	Improvement of Instruction in Distributive Education 2	
	B. Electives in	Business Education and/or Distributive Education 10	s.h

IV. Comprehensive Examination

#### Distributive Education

III. Free Electives

# REQUIREMENTS FOR THE CERTIFICATION PROGRAM

Required Courses

Holders of a New Jersey teacher's certificate in the field of business education who complete the following required specialization courses will be

6-8 s.h.

Minimum: 32 s.h.

eligible for certification in Distributive Occupations. Courses (or their equivalents) will be waived that have been completed at either the graduate or undergraduate level, prior to admission to the program.

D.E.	414.	Merchandising (Marketing & Distribution)	2	s.h.
D.E.	452.	Principles of Vocational Education	2	s.h.
D.E.	453.	Curriculum Development in Distributive Education	2	s.h.
D.E.	454.	Principles & Methods in Distributive Education	2	s.h.
D.E.	455.	Coordination of Distributive Education	2	s.h.
D.E.	456.	Organization and Administration of Distributive		
		Education	2	s.h.
D.E.	551.	Improvement of Instruction in Distributive Education	2	s.h.
D.E.	552.	Advanced Salesmanship	2	s.h.
D.E.	553.	Trends in Retail Distribution	2	s.h.
B.E.	603.	Research Seminar in Business Education	2	s.h.
		2	20	s.h.

Work Experience—Certification for Distributive Occupations requires two years of approved work experience in distributive occupations. This requirement may also be fulfilled by successful completion of the following:

Full-time coordinated and supervised work experience in an approved work station for the months of July and August (minimum of 8 weeks is required for D.E. 450 and also for D.E. 451). One evening class session a week is scheduled with the work program to discuss the progress and program.

# REQUIREMENTS FOR THE M.A. DEGREE IN DISTRIBUTIVE EDUCATION INCLUDING CERTIFICATION

I. Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h.

#### II. Specialization

11-20 s.h.

#### A. Required Courses

Holders of a New Jersey teacher's certificate in the field of business education who complete the required specialization courses shown above in the certification program will be eligible for certification in Distributive Occupations. Courses (or their equivalents) will be waived that have been completed at either the graduate or undergraduate level, prior to admission to the program.

When courses are waived, students seeking a master's degree can fulfill the specialization requirement by substituting courses from list "B. Electives in Distributive Education."

### B. Electives in Distributive Education

D.E. 406.	Advertising	2	s.h.
D.E. 417.	Marketing	2	s.h.
D.E. 418.	Retail Store Management	2	s.h.
D.E. 419.	Merchandise Information	2	s.h.
D.E. 422.	Visual Merchandising	2	s.h.
D.E. 423.	Buying for Distribution	2	s.h.
D.E. 522.	Advertising Media	2	s.h.

D.E. 554.	Workshop in Problems of Distributive Education	2 s.h.
D.E. 555.	Credits and Collections	2 s.h.
D.E. 556.	Retail Personnel Administration	2 s.h.
D.E. 557.	Sales Management	2 s.h.
D.E. 558.	Executive Leadership in Retailing	2 s.h.
D.E. 559.	Development of Retail Training Programs	2 s.h.

C. Work Experience—Certification for Distributive Occupations requires two years of approved work experience in distributive occupations. This requirement may also be fulfilled by successful completion of the following:

Full-time coordinated and supervised work experience in an approved work station for the months of July and August (minimum of 8 weeks is required for D.E. 450 and also for D.E. 451). One evening class session a week is scheduled with the work program to discuss the progress and program.

III. Free Electives

6-8 s.h.

Minimum 32 s.h.

IV. Comprehensive Examination

# REQUIREMENTS FOR THE M.A. DEGREE IN DISTRIBUTIVE EDUCATION NOT INCLUDING CERTIFICATION

I. Basic Professional Education (See Master's Degree Program Pattern) 6-9 s.h.

II. Specialization

11-20-s.h.

Courses to be selected upon the recommendation of the advisor. Each program will be designed to satisfy the needs and goals of the individual student.

III. Free Electives

6-8 s.h.

Minimum 32 s.h.

IV. Comprehensive Examination

#### GRADUATE COURSES IN BUSINESS EDUCATION

B.E. 501. Principles and Problems of Business Education

2 s.h.

Survey of basic principles and practices of business education. Topics include history of business education, objectives, relationship of business education to general education, trends and problems in the field.

B.E. 502. Evaluation of Current Literature in Business Education 2 s.h

Introduces the literature of business education to the graduate student from a research point of view. Current literature from all sources—articles, research papers, books—are evaluated, using selected criteria for such evaluation.

B.E. 503. The Business Education Curriculum

2 s.h.

Study of curricula in business education for various levels and types of schools. Evaluation of specific programs; development of improved curricula.

B.E. 504. Evaluation and Measurement in Business Education 2 s.h.

Constructing, administering, interpreting, and evaluating all types of testing and evaluation materials in business subjects.

B.E. 505. Administration and Supervision of Business Education 2 s.h.

Study of problems of organizing, directing, and supervising business education programs at the secondary school and collegiate levels.

# B.E. 511. Improvement of Instruction in Bookkeeping, Accounting, and Business Arithmetic 2 s.h.

Study of objectives, content, methods, teaching aids, and evaluation procedures. Prerequisites: Undergraduate methods course in bookkeeping and teaching experience.

#### B.E. 512. Improvement of Instruction in General Business Subjects 2 s.h.

Study of objectives, content, methods, teaching aids, and evaluation procedures for courses such as general business, economic geography, business law, and consumer education. Prerequisites: Undergraduate methods course in general business and teaching experience.

# B.E. 513. Improvement of Instruction in Stenography and Secretarial Practice 2 s.h.

Refinement of teaching and personal skills, introduction to the latest instructional equipment and method are emphasized through demonstration, participation, and reading. Prerequisites: Undergraduate methods in stenography and teaching experience.

# B.E. 514. Improvement of Instruction in Typewriting and Clerical Practice 2 s.h.

Emphasis is placed on refinement of teaching and personal skills in typewriting and business machine operation. Latest recommended teaching techniques are examined, demonstrated, and evaluated. Prerequisites: Undergraduate methods in typewriting and teaching experience.

#### B.E. 521. Business Management Problems

2 s.h.

The problems approach is used in this advanced course in considering such topics as business ownership, finances, location and layouts, purchasing, personnel, and managerial controls.

#### B.E. 523. Auditing

2 s.h.

This course develops the meaning and techniques of auditing procedure. It includes practice in the fundamental mechanics of auditing as well as in the making of the formal report on an audit. Prerequisite: 8 semester hours of accounting.

#### B.E. 524. Advanced Tax Problems

2 s.h.

Preparation of tax returns for partnerships, trusts, corporations, and complicated individual tax returns. Also inheritance taxes, gift taxes, social security taxes, and tax benefits and returns required under social security tax law.

#### B.E. 525. Accounting Systems and Data Processing

2 s.h.

Deals with analysis of accounting systems and the organization of accounting information for use with manual and automated methods.

#### B.E. 526. Advanced Business Law Cases

2 s.h.

Designed to furnish a broad understanding and background in areas requiring considerable training to be effective in the classroom. Cases are concerned with the topics of contracts, negotiable instruments, insurance, bailments, carriers, sales, property, landlord and tenant, torts, and business crimes. Prerequisite: 6 semester hours of business law.

# B.E. 527A, B, C, D. Workshop in Clerical and Secretarial Practice, Advanced Stenography, Advanced Typewriting, Office Machines 2 s.h. each

These workshops, which may run simultaneously, provide opportunity for the study, planning, and development of teaching materials and projects fitted to the particular situation in which the person is teaching. Instruction is on an individual and small-group basis with occasional seminar meetings of the entire group. Prerequisite: Teaching experience in the field.

#### B.E. 528. Field Studies in Business Education

2 s.h.

Provides opportunity for the classroom teacher to visit and evaluate some of the practices of business offices, industries, and retailing organizations located in the metropolitan area. Experience is gained in planning, conducting, and follow-up of field trips.

#### B.E. 529. Audio-Visual Aids in Business Education

2 s.h.

This course develops knowledge and skill in using the many audio and visual aids available in teaching business subjects. Opportunity is provided for developing and constructing teacher-made audio-visual aids.

## B.E. 530. Business Education in Post-High School Institutions

2 s.h.

This course is designed to acquaint the student with the purposes, curricula, methods, and problems of teaching business education subjects in post-high school institutions, including technical institutes, two-year, and four-year colleges.

#### B.E. 603. Research Seminar in Business Education

2 s.h.

Includes study and analysis of significant research studies in business education, investigation of procedures in education research, and techniques of thesis writing. Prerequisites: Education 503, Business Education 501, and Business Education 502, or equivalents.

#### SENIOR-GRADUATE COURSES IN BUSINESS EDUCATION

#### B.E. 404. Business Economics

3 s.h.

Although the nature and scope of economics is presented, this course deals primarily with the business aspects of economics as related to the free enterprise system, money credit and banking, Gross National Product, and devices measuring economic progress. The Federal Reserve System, business fluctuations and business cycles, taxation and government finance are also included as specific areas of course coverage.

#### B.E. 405. Office Practice-Clerical

3 s.h.

Much of the work in this course involves the use of machines—calculating, duplicating, bookkeeping, special typewriters, and transcribing machines. Filing is also part of the course,

#### B.E. 407. Office Practice-Secretarial

3 s.h.

This course familiarizes the prospective teacher of secretaries with the operation of voice-writing and duplicating equipment. The duties of the secretarial worker are studied. Understanding of office procedures and stenographic skills are strengthened through supervised office assignments and class work projects.

#### B.E. 408. Business Finance

3 s.h.

This course deals with the processes involved in the financing of business organizations from the time of their inception and promotion, during operation and expansion, and during the period of reorganization. Problems involving financing by means of stocks, borrowing capital, mortgages, bonds, and notes are solved.

#### B.E. 409. Consumer Education

3 s.h.

Consideration is given to the role of the consumer in the economy, some of the forces affecting consumer demand, governmental and private agencies aiding the consumer, and development of intelligent techniques for buying and using consumer goods and services.

Not open to students who have completed B.E. 421 or equivalent,

#### B.E. 410. Advanced Accounting

3 s.h.

This advanced course for students who have had two years of accounting emphasizes problems related to basic accounting principles, cost accounting, and intermediate accounting. Topics considered include determination of net income, valuation, consignments, preparation and analysis of financial statements, partnerships, and bankruptcy. Prerequisite: B.E. 402 or college equivalent.

#### B.E. 411. Tax Accounting

2 s.h.

The purpose of this course is to give a comprehensive picture of the Federal tax structure. Extensive training is provided in the application of basic principles to the specific problems of the individual. All forms involved in individual tax returns are studied. Prerequisite: 12 semester hours of accounting.

#### B.E. 420. Field Studies in Business Education

2 s.h.

This course aims to introduce business education students, through direct observation, to the realities of the business world. Field trips are made in the New York metropolitan area which include visits to business organizations where the following types of business activity or relationships may be observed: production, merchandising and advertising, finance transportation and communication, employer-employee relationships, government and business relationships. Field trips are supplemented by regular class sessions where discussions are held and visual aids presented to make the visits more meaningful.

#### B.E. 421. Finance and Investments for Families

2 s.h.

This is a general course in investments, trusts, and estates. It concerns itself with types of securities, diversification, sources of information, operation of the stock market, and analysis of financial statements. Also covered are trusts, wills, and estate planning.

# B.E. 433. Seminar: Study of use of Multiple-Channel Equipment in the Business Education Classroom 3 s.h.

This seminar concentrates on the use of multiple-channel equipment in the teaching and development of skills; explores the learning materials presently available; experiments with the development of original learning materials; studies problems arising for the teacher and the student in the use of such equipment; and explores the possibility of independent study in the skills areas. The writings and experiences of others using similar installations are evaluated. Various makes of equipment are studied. Some familiarity with the use of such equipment is achieved.

#### B.E. 434. Data Processing-Introduction

3 s.h.

The primary purpose of this course is to familiarize the classroom teacher with literature and vocabulary of data processing; to study input and output media; types of equipment; to examine actual installations and to consider data processing in terms of the high school program and high school placement. The significance of job analysis and systems development is stressed.

#### B.E. 435. Unit Record Equipment I

3 s.h.

Concepts and operational techniques of punched card data processing machines. Control panel wiring and experience with the card punch, accounting machine, verifier, and sorter. Lecture: 2 hours; Laboratory: 2 hours.

#### B.E. 436. United Record Equipment II.

3 s.h.

Advanced concepts and operational techniques of punched and data processing machines. Control panel wiring and experience with interpreter, reproducer, and allied equipment. Emphasis on individual projects. Lecture: 2 hours; Laboratory: 3 hours. Prerequisite: Unit Record Equipment I.

#### B.E. 449. Supervised Business Work Experience and Seminar

2 s.h.

Students will gain supervised paid-for work experience in a cooperating office. As part of the supervised work program they attend a weekly evening seminar in which discussions will center on their activities in the offices, and on their development of executive abilities during the training. Trainees are required to submit regular progress reports. Work program is in operation full time during July and August (minimum six weeks) of the summer session following their junior year, and is offered every summer for graduate and special students.

#### B.E. 470. Business Education for Teachers of the Disadvantaged 2 s.h.

This course is designed to prepare teachers of business subjects to meet the specific needs of disadvantaged students. Emphasis is given to the occupational opportunities open to the disadvantaged and the secondary school business program which will prepare them for these occupations. Teachers will build curricula and develop special instructional materials and methods needed for disadvantaged students in the inner-city schools.

#### B.E. 480. Touch Shorthand in Recording Communication

2 s.h.

This course concentrates on introducing keyboard reaction patterns and theory concepts of the touch shorthand machine and in developing basic skills and a knowledge of operation of the machine. Time will also be devoted to discussing methods of presentation, and there will be discussions on how the teacher would organize and evaluate a course in touch shorthand.

#### GRADUATE COURSES IN DISTRIBUTIVE EDUCATION

#### D.E. 522. Advertising Media

2 s.h.

This course in advertising offers an opportunity to study in some detail the uses of various advertising media such as newspapers, magazines, radio, television, and direct mail, and to evaluate their effectiveness in terms of campaigns.

#### D.E. 551. Improvement of Instruction in Distributive Education 2 s.h.

This course gives the experienced distributive education teacher an opportunity to study the content, method, teaching aids, and evaluate procedures in instruction in the distributive education program.

#### D.E. 552. Advanced Salesmanship

2 s.h.

The behavioral science of selling is covered including the strategy of selling, importance of timing, tailoring selling to the individual prospect, sales psychology behind the demonstration, creative selling, and the nature of prospects' motivation. Sales executives are invited to the classroom to answer questions and relate personal experiences of the professional salesman.

#### D.E. 553. Current Retail Trends

2 s.h.

A comprehensive introduction to and evaluation of the field of retailing. The trends that indicate the future structure and functioning of the retail field, including consumer and marketing developments, are considered. Current periodic literature is examined and outside speakers are used to supplement classroom lectures.

#### D.E. 554. Workshop in Problems of Distributive Education

2 s.h.

Intensive analysis of problem-solving in distributive education programs. Discussion on individual problems and experiences in teaching and administering distributive education programs. Committee work-seminar method is used.

#### D.E. 555. Credits and Collections

2 s.h.

Study is made of the nature, basis and meaning of credit and credit control. Topics include functions of credit, credit instruments, types of credit, elements of determining credit risk, sources of credit information, and collection procedures.

#### D.E. 556. Retail Personnel Administration

2 s.h.

The objective of this course is to develop a comprehensive understanding of the personnel responsibilities of all retailing executives. A critical evaluation of current personnel policies and practices of successful retail stores is made. Visiting store executives are invited to discuss personnel administration in the classroom.

#### D.E. 557. Sales Management

2 s.h.

The place of the sales manager in modern retail marketing is covered as well as sales organization, sales operations, sales planning, and sales analysis. Also considered are the selection and training of salesmen, ethical problems in sales management, and social responsibilities of a sales manager in today's marketing operations.

#### D.E. 558. Executive Leadership in Retailing

2 s.h.

The objectives of this course are to acquaint the student with and to make him aware of the kinds of interrelationships among people in the retail organization, as well as to give the student insight into the techniques and problems of the modern executive. Awareness of the leadership required and the need for decision making are covered.

#### D.E. 559. Developing of Retail Training Programs

2 s.h.

Analysis of training problems confronting managers in both line and staff positions are covered. The course includes both selling and non-selling programs, the training of new and present employees, general training of personnel in the store as it relates to store policies, store organization, and morale. Job analysis and evaluation as well as training of executives and supervisors for transfer, promotion, and versatility are considered.

#### SENIOR-GRADUATE COURSES IN DISTRIBUTIVE EDUCATION

#### D.E. 406. Advertising

2 S.H.

A comprehensive view is given of the policies and procedures involved in the planning, preparation, and application of advertising in a retail store. A critical approach is taken to the problems confronting the field of advertising and sales promotion. Consideration is given to the definition of sales promotion, objectives, establishment of policies, analysis of sales potentials, evaluation of media and agents, coordination and follow-up of sales promotion and advertising.

#### D.E. 414. Merchandising

2 s.h.

This course analyzes the problems of how, what, where, and when to buy; terms of purchasing, tested receiving and marketing procedures; mathematics of merchandising—setting retail price, planning mark-up and mark-down; and inventory controls. Part-time store experience is recommended as an integrated part of this course,

#### D.E. 417. Marketing

2 s.h.

A study of the principles underlying the distribution and services from the manufacturer to the consumer. Marketing policies and practices are covered as well as the evolution and change of marketing procedures and recent governmental activities affecting marketing. A managerial approach to the subject is given. Part-time store experience is recommended as an integrated part of this course.

#### D.E. 418. Retail Store Management

2 s.h.

The main objective of this course is to acquaint students with the problems involved in the successful operation of a retail organization. Attention is given to the preparation of the store for business, the movement of merchandise from the source to the store, the preparation of the goods for sale, the movement of the goods to the selling floor and then to the customer. Customer adjustment policies, store protection, and the latest kinds of equipment used by retail stores are also discussed and evaluated. Part-time store experience is recommended as an integrated part of this course.

#### D.E. 419. Merchandise Information

2 s.h.

Merchandise information, both textiles and non-textiles, are covered to give the student the background and selling information needed in the field of retailing. Students will be given standards for determining quality of products and a knowledge of how to care for them. Manufacturing processes of various products will be considered.

#### D.E. 422. Visual Merchandising

3 s.h.

A study is made of the basic principles and elements of color, line, form, texture, and space as they relate to displays, merchandising, and advertising. Topics include appropriate display space, lighting arrangements, improvisation of display equipment, the use of papier mache forms, seasonal displays, equipment, and care of display fixtures.

#### D.E. 423. Buying for Distribution

2 s.h.

A study of the techniques employed in performing the functions of the merchandise division of a store. The functions of the buyer and the many facets of the buyer, and problems in the store are discussed. Other topics included are customer demand analysis, comparison shopping, bargain hunting, and planning the buyer's budget. Buying fashions, staples for independent stores, chain stores, and resident buying offices, as well as foreign buying are covered.

#### D.E. 450. Supervised Work Experience and Seminar I

2 s.h.

Students will gain supervised paid-for work experience in a cooperating department or mass merchandise (discount) store. As part of the supervised work program they attend a weekly evening seminar in which discussions will center on their activities in the stores and on their development of executive abilities during the training. Trainees are required to submit regular progress reports. Work program is in operation full-time during July and August (minimum of 8 weeks) of the summer session following completion of the sophomore year for undergraduates, and offered every summer for graduate and special students.

#### D.E. 451. Supervised Work Experience and Seminar II

S.II.

Supervised paid-for store experience is gained in a specialty or limited-price variety store. Students attend a weekly evening seminar in which discussons will center on their activities in the stores and on their development of executive abilities during the training. Trainees are required to submit regular progress reports. Work program is in operation full-time during July and August (minimum of 8 weeks) of the summer session following completion of the junior year for undergraduates, and offered every summer for graduate and special students.

#### D.E. 452. Principles of Vocational Education

2 s.h.

The purpose of this course is to acquaint educators and prospective educators with the basic principles and practices of vocational education. The course covers the cooperative Federal-State programs of vocational education developed under the Smith-Hughes Act, George-Barden Act, George-Deen Act, and the 1963 Vocational Education Act.

#### D.E. 453. Curriculum Development in Distributive Education

2 s.h.

The purpose of this course is to acquaint educators and prospective educators with the construction of the distributive education curriculum. Included are an understanding of the needs and interests of the community in curriculum planning, careful planning and group cooperation in curriculum, the over-all development of the pupil, developing vocational competencies in curriculum, adult education curriculum planning, keeping records and results through follow-up procedures, and the evaluation of curriculum.

#### D.E. 454. Principles and Methods of Distributive Education

2 s.h.

The purpose of this course is to acquaint educators and prospective educators with the basic principles of teaching distributive education as well as specific methods of teaching the program. Coverage includes the federal legislation as it relates to the program, coordinator's duties, methods in teaching store subjects, use of lecture and demonstration in teaching, forms, reports and manuals, planning the lesson, human relations for store personnel, visual aids, free sources of materials, textbook evaluation, trade journal use, and the DE Club as a teaching device. Teaching demonstrations are also a part of the program.

#### D.E. 455. Coordination of Distributive Education

2 s.h.

The purpose of this course is to acquaint educators and prospective educators with the objectives of distributive education as they relate to the coordinated distributive education program. Included are the coordinator's job, basic factors of cooperative programs, the use of advisory committees, policies of local school systems, making preliminary surveys of the community, evaluating training possibilities, selecting training agencies, pupil selection, supervision and directed study methods.

#### D.E. 456. Organization and Administration of Distributive Education 2 s.h.

The purpose of this course is to acquaint educators and prospective educators with the objectives of distributive education and with the details and problems of organizing and administering as well as supervising a complete cooperative program in distributive education. Areas covered are: organization of vocational education on the federal, state and local levels, understanding the use of a state syllabus, setting up, supervising and operating a cooperative program, surveys of community needs and student needs, physical equipment requirements, advisory committees, and the use of public relations and extension programs.

# DEPARTMENT OF EDUCATION

Graduate Advisors: DR. EARL PECKHAM, Administration and Supervision

DR. EARL C. DAVIS, Student Personnel Services, including School Social Work

(Visiting Teacher)

MISS SIMONE PICARD, Major in Teaching

MISS MARIA SCHANTZ, Reading

Dr. Edward J. Ambry, Outdoor Education and Conservation

Graduate courses in this department are designed to meet one or more of six needs: (1) instruction in the Administration and Supervision major leading to the M.A. degree and New Jersey certification for one or more of the positions of General Secondary Supervisor, Secondary School Principal, and Assistant Principal or Vice Principal; (2) instruction in the Student Personnel Services, including School Social Work (Visiting Teacher) leading to the M.A. degree and New Jersey certification in guidance and school social work; (3) advanced professional instruction for administrators, supervisors, counselors, and classroom teachers; and (4) Master of Arts with a major in Teaching, designed to prepare liberal arts college graduates for teacher certification by combining certification requirements with additional work at the graduate level; (5) M.A. in Reading; and (6) M.A. in Outdoor Education and Conservation.

The admission requirements and the requirements for the M.A. degree in each of the separate areas within the field of Education are given separately. Students who are not candidates for a degree may elect any courses except those for which they may not have the necessary prerequisites or which are restricted to candidates in the field of specialization.

# ADMISSION TO AND REQUIREMENTS FOR THE M.A. DEGREE IN ADMINISTRATION AND SUPERVISION

# **Admission Requirements**

In addition to the general College admission requirements, a student must hold a New Jersey teacher's certificate and have at least two years teaching experience in grades 7-12 completed prior to matriculation. Those whose undergraduate work and experience were obtained outside of New Jersey must meet New Jersey certification and experience standards. The degree will not be conferred until the candidate has had three successful years of teaching experience at the secondary level.

# **Degree Requirements:**

Satisfactory completion of not fewer than thirty-two semester hours of work as follows: (In exceptional cases appropriate substitutions or changes may be made in these requirements upon approval of the Program Advisor.)

I. Foundations for Educational Leadership

(7 to 8 s.h. subject to approval by Graduate Advisor)

502 Matheda and Instruments of December

		503 Methods and Instruments of Research	
		406 Educational Sociology	
		431 Individual and Group Dynamics	
		492 Comparative Education	
	Psych.	453 Social Psychology	3 s.h.
		578 Psychological Tests and Measurements	
		565 Community Resources and Youth	
		533 Philosophy of Education	2 s.h.
	Ed.	534 Economic and Political Determinants in	2 - 1-
		New Jersey	2 s.n.
TT	Specialization	n	
11.	•	specializing in Administration of Secondary Schools	
	A. For those		h. required
	Ed. 510	Introduction to Educational Administration	
	Ed. 511	School Business Administration	
	Ed. 511	School Law	
	Ed. 520	Administration of the Modern Secondary Schools	
	Ed. 530	Curriculum Construction in the Secondary Schools	
	Ed. 629	Research Seminar in Secondary School Administration	
	Ed. 540	Supervision of Instruction	
	120. 540	Supervision of Institution	2 5.11.
	B. For those	specializing in Supervision and Curriculum Developme	nt
		12 s.	h. required
	Ed. 510	Introduction to Educational Administration	2 s.h.
	Ed. 408	Selection and Utilization of Audio-Visual Materials	
	**Ed. 530	Curriculum Construction in the Secondary Schools	2 s.h.
	Ed. 639	Research Seminar in Curriculum Construction	
		Development	
	**Ed. 540	Supervision of Instruction	
	Ed. 541	Supervision in Special Fields	
	**Ed. 538	Curriculum Construction in the Elementary School	
		Ed. 472 Elementary School Curriculum	2-3 s.h.
TIT	Free Elective	25	6 s.h.
111.	17ce Liective	50	0 5.11.
IV.	Educational	Electives	2-4 s.h.
	One or two	2 s.h. graduate courses elected from the Education 1	Department
	graduate offe	erings with the approval of the Graduate Advisor.	
*7			2 1
٧.	(Education 6	ence in Administration and Supervision	2 s.h.
		s are to be earned through an administrative or supe	
	signment in	a public junior or senior high school in cooperatio	n with the

principal of the school, and supervised by a college staff member. Where such assignments are not possible an appropriate substitute experience will be planned with the student's advisor. Those specializing in supervision and curriculum development will be assigned to their chosen area or level of

education. \* Required courses

<sup>\*\*</sup> Required for supervisor's certificate in combination with six (6) semester hour credits of elective course work in supervision and/or curriculum in a particular grade level or in a specific subject field.

#### VI. Comprehensive Examination

In addition to successful completion of the thirty-two semester hours of graduate work study, each candidate must pass a written comprehensive examination testing the professional insight, judgment, and broad acquaintance needed for the leadership role in education.

#### REQUIREMENTS FOR SUPERVISOR'S CERTIFICATION

#### Admission

This program is open to students who possess a New Jersey teaching certificate and desire advanced certification without obtaining the Master's degree and to students who are working toward a Master's degree in the subject matter fields. With careful planning of Basic Professional Education courses and Free Electives a student may fulfill most of the supervisor's certification requirements while pursuing an M.A. in fields other than Administration and Supervision.

#### Requirements

The Certification requirements are twelve or thirteen semester hour credits in the area of Supervision and Curriculum. The three required courses fulfill the background courses necessary for the certificate. The electives allow the student to specialize in a particular area.

## The Program

PROTUPED
REQUIRED 6-7 s.h.
Ed. 530 Curriculum Construction in the Secondary School
Ed. 538 Curriculum Construction in the Elementary School or 2 s.h.
Ed. 472 Elementary School Curriculum
Ed. 540 Supervision of Instruction 2 s.h.

# ELECTIVES: A minimum of six (6) semester hour credits to be selected from courses listed below:

B.E.	505	Administration and Supervision of Business Education	2	s.h.
Ed.	461	The Junior High School Curriculum	3	s.h.
Ed.	502	Teaching Block of Time Curriculum in the Junior		
		and Senior High School	2	s.h.
Ed.	541	Supervision in Special Fields	2	s.h.
Ed.	639	Research Seminar in Curriculum Development		
		(for students who have completed the equivalent		
		of/or Ed. 503 and Ed. 530)	2	s.h.
Ed.	587	Administration and Supervision of Guidance Programs	2	s.h.
F.A.	502	Curriculum Construction in Art Education		
Home Ec	. 423	Seminar in the Supervision of Home Economics	2	s.h.
I.A.	501	Curriculum Content and Course Organization		
I.A.	504	Supervision of Industrial Arts	3	s.h.
I.A.	509	Curriculum Construction in Vocational-Technical		
		Education	2	s.h.
Math.	570	Administration and Supervision of Mathematics	2	s.h.
Math.	571	Curriculum Construction in Mathematics	2	s.h.
H.E.	526	Curriculum Development in Health Education	2	s.h.
P.E.	576	Curriculum Development in Physical Education	2	s.h.
P.E.	577	Administration and Supervision in Physical Education	2	s.h.
Soc. St.	501	Modern Social Studies Instruction and Supervision	2	s.h.
Speech	533	Supervision of Speech and Hearing Programs		
			_	

# IN STUDENT PERSONNEL SERVICES, INCLUDING SCHOOL SOCIAL WORK (Visiting Teacher)

In addition to general College Admissions Requirements, a student must hold a New Jersey teacher's certificate and have completed at least one year of teaching prior to matriculation. (Not more than eight semester hours of credit will be counted toward this degree prior to the obtaining of the certificate and the beginning experience.)

For candidates for the school social work certificate and/or degree no teacher's certificate is required and one year of school social work experience may be substituted for the teaching experience.

I.	Guidance and Counseling	6	s.h.
	Ed. 580 Principles of Guidance	2	s.h.
	Ed. 588 Techniques of Interviewing and Counseling	2	s.h.
	Ed. 582 Vocational Guidance	2	s.h.
II.	Testing and Evaluation	3	s.h.
	Ed. 578 Testing and Evaluation in Student Personnel Services	3	s.h.
III.	Psychology Select	6	s.h
	Psych. 560 Advanced Educational Psychology		
	Psych. 561 Child and Adolescent Development		
	Psych. 562 Dynamics of Human Behavior		
	Psych. 563 Theories of Learning		
	Psych. 564 Psychology and Education of the Physically		
	and Mentally Handicapped Children	3	s.h.
	Psych. 565 Psychology and Education of the Socially		
	and Emotionally Handicapped Children	3	s.h.
	Psych. 573 Physiological Psychology	3	s.h.
IV.	Sociological Foundations	6	s.h.
	Required:		
	Soc. 565 Community Resources and Youth	3	s.h.
	Select 3 s.h. from the following:		
	Soc. 401 Modern Sociology		
	Soc. 402 Social Pathologies	3	s.h.
	Soc. 404 The Family as an Institution or		
	Home Ec. 429 Family Sociology		
	Soc. 406 Rural Sociology		
	Ed. 406 Educational Sociology	3	s.n.
V.	Research	6	s.h.
	Ed. 503 Methods and Instruments of Research (required)	2	s.h.
	A. For emphasis in Guidance:		
	Ed. 602 Research Seminar in Guidance	2	s.h.
	Ed. 604 Field Work in Guidance	2	s.h.
	B. For emphasis in School Social Work (Visiting Teacher)		
	Ed. 605 Research Seminar in School Social Work	2	s.h.
	Ed. 607 Field Work in School Social Work (Visiting Teacher)	2	s.h.
VI.	Electives 6 s.h. mir	in	ıum
	Ed. 509 Medical Problems in Education		
	Home Ec. 427 The Disadvantaged Family	2	s.h.
	J		

Ed.	577	Social Case Work 2 s.h.
Ed.	595A	or 595B Foundations of Education I or II
	(For	students who do not hold teaching certificates)
		Educational Guidance 3 s.h.
Ed.	585	Group Guidance and Counseling
Ed.	586	Elementary School Guidance and Counseling 3 s.h.
Ed.	587	Administration and Supervision of Guidance Programs 3 s.h.
Ed.	589	Student Personnel Services in Higher Education 3 s.h.
Ed.	579	Use of Tests in Counseling
		Minimum 32 s.h.

## Certification Requirements for School Social Worker (Visiting Teacher)

Students who desire to earn the School Social Worker (Visiting Teacher) certificate and who do not plan to matriculate for the Master of Arts degree must complete the following courses or their equivalents:

Psych.	561	Child and Adolescent Development 3 s.h.
Ed.	595A	or 595B Foundations of Education I or II 3 s.h. each
Soc.	401	Modern Sociology
Soc.	404	The Family as an Institution or
Home Ec.	429	Family Sociology or
Soc.	405	Urban Sociology
Ed.	577	Social Case Work
Psych.	562	Dynamics of Human Behavior
Soc. Ed	509	Medical Problems of Education 2 s.h.
Soc. St.	565	Community Resources and Youth
Home Ec.	427	The Disadvantaged Family
Ed.	605	Research Seminar in School Social Work
	(Visi	ting Teacher) or
Ed.	607	Field Work in Social Work (Visiting Teacher) 2 s.h. each
		Total 25 s.h.

An evaluation of a student's previous work will be made. If the student has completed equivalent courses at the undergraduate level or in post-graduate work, these will be accepted for certification and the balance of graduate work will be outlined on a work program (program of studies) which will be issued to the student.

# ADMISSION TO AND REQUIREMENTS FOR THE M.A. DEGREE IN READING SPECIALIZATION (7-12)

# **Admission Requirements**

Requirements are those for all graduate students applying for matriculation into a Master's Program at Montclair State College.

Matriculation normally requires prior completion of the basic courses in reading education needed for New Jersey certification to teach reading.

Provision is made in this program to matriculate certified secondary school teachers who have demonstrated interest and ability suitable to reading education. These applicants shall furnish acceptable evidence of talent appropriate for competence in reading instruction. Evidence, for example, may be in the form of letters of recommendation from the school system superintendent or the school building principal.

## **Degree Requirements**

Satisfactory completion of not fewer than thirty-two semester-hours of work as follows: (In exceptional cases appropriate substitutions or changes may be made in these requirements upon approval by the Program Advisor).

I. Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h. aureas from the following

Elect	courses	from	the following:		
Gradi	Graduate Courses:				
	Ed.	500	Recent Trends in Secondary School Methods		
	Ed. Ed.	514 550	School Law	2 s.h.	
	Lu.	550	School Students		
	Psych.		Advanced Educational Psychology		
	Psych.		Child and Adolescent Development  Dynamics of Human Behavior		
	Psych. Psych.		Psychology and Education of the Gifted		
Senio	r-Gradi	iate C	orses:		
	Ed.	406	Educational Sociology	3 s.h.	
	Ed.	408	Selection and Utilization of Audio-Visual Materials	2 s.h.	
	Psych.		Social Psychology		
	Ed.	492	Comparative Education	3 s.h.	
			or-Graduate Related Courses:		
			eceive credit for one or the other courses selected	from	
each pair	Ed.	501		2 - 1	
	Eu. Psych.		Tests and Measurements in Secondary Education or  Psychological Tests and Measurements		
	Psych.		Psychology and Education of the Physically and	0 0.11	
			Mentally Handicapped Children or		
	Psych. Psych.		Psychology and Education of the Handicapped or Psychology and Education of the Socially and	3 s.h.	
	1 Sych.	505	Emotionally Handicapped Children	3 s.h.	
	Ed.	580	Principles and Techniques of Guidance or	2 s.h.	
	Ed.	451	Guidance for the Classroom Teacher	3 s.h.	
II. Speci	alizatio	n in I	Reading	0 s.h.	
	•		ses for all candidates:		
	d. 552		nciples of Reading Improvement in Secondary Schools	2 s.h.	
Е	Ed. 554		se Studies of Reading Difficulties:	3 ch	
Е	Ed. 556		rrective and Remedial Reading:	J 3.II.	
		Par	t I Causation		
	d. 659		search Seminar in Reading	2 s.h.	
	lective (		<del></del>		
			the following courses will be determined through a d on needs and interests of each student. Reading Ele		
			least one of these courses.)	CHVCS	
		51N	Organization and Administration of Secondary School		
			Reading Programs	2 s.h.	
	Ed.	553	Techniques of Reading Improvement in Secondary Schools	2 ch	
	Ed.	555	Case Studies of Reading Difficulties:	2 5.11.	
			Deat II Death	0 1	

Part II Reporting 2 s.h.

Ed.	557	Corrective and Remedial Reading: Part II Treatment Field Experiences in Reading		
			سک	3.11.
Courses Sp	pecificali	ly Related to Reading:		
Eng.	512	Growth and Structure of the English Language	2	s.h.
Eng.	516	Language Problems in the English Cuririculum	2	s.h.
Eng.	541	The New Grammar	2	s.h.
Speech	439A	Phonetics	2	s.h.
Speech	439G	Speech Correction		
Speech	464	Psychology of Oral Communication	2	s.h.
Speech	466	Speech Development: Improvement and Re-Education	2	s.h.
Speech	468	Measurement of Hearing	2	s.h.
Ed.	408	Selection and Utilization of Audio-Visual Materials	2	s.h.
Psych.	564	Psychology and Education of the Physically and		
		Mentally Handicapped Children	3	s.h.
Psych.	565	Psychology and Education of the Socially and		
		Emotionally Handicapped Children	3	s.h.

#### IV. Additional Departmental Requirements:

III. Free Electives

- A. Supervised clinical experience within the framework of a required course and/or in addition to course work. Arrangements will be made to provide this experience in the Montclair State College Campus Reading Center.
- B. A written comprehensive examination, supplemented, if necessary, by an oral examination.

Minimum 32 s.h.

6-8 s.h.

#### COURSES

Education, English, and Speech courses are listed in their respective departments in this catalog.

Additional courses in Reading Specialization are listed in Education offerings.

# ADMISSION TO AND REQUIREMENTS FOR THE M.A. DEGREE (Major in Teaching)

# SECONDARY (7-12) AND SPECIAL FIELDS (K-12)

These Certificate and Master's Degree programs are designed especially for college students who wish to prepare to become secondary school teachers or teachers of special subjects such as art and music in the elementary and secondary grades. The content, organization, materials, and methods of these courses are designed with consideration of the student's maturity, academic background, and experience. This M.A. program is open to students with undergraduate background equivalent to a teaching field in one of the following areas: Art, Business Education (e.g. Bookkeeping and Accounting, General Business Education, Secretarial Studies), English, Foreign Languages (e.g. French, Spanish, Latin), Home Economics, Industrial Arts, Mathematics, Music, Physical Education, Science, Social Sciences, Speech and Dramatic Arts.

# Admission Requirements: (Certificate\* or Degree Programs)

Admission is restricted to those selected graduates of accredited colleges who indicate high potential for teaching, and to in-service teachers with emergency or provisional certificates.

College graduates not employed as teachers will be screened for admission with due consideration to:

- a. Suitability or character and personality for teaching
- b. Health examination
- c. Speech and writing competence
- d. Competence in teaching field, based upon undergraduate grades of B— or better (2.67 on a 4 pt. scale). Students who present lower grade point averages must also present scores earned on the Graduate Record Examination Aptitude Test.

In-Service teachers holding emergency or provisional certificates, employed by local school districts, will be admitted to the program to the extent to which the College staff can provide adequate supervisory services upon application, and agreement of the employing superintendent of schools to enter into a cooperative program of supervision of the student in connection with course Education 595E, 595F Supervised Teaching Seminar. During the first semester these students will complete the application procedure regarding character, health, speech, and writing, and preparation in subject-matter field. When the student completes six to ten semester hours at Montclair, a decision will be made regarding matriculation for the M.A. degree. If, as a result of failure to satisfy the screening criteria or unsatisfactory performances in the program, it is considered necessary to withdraw a student, conferences will be arranged with the student and the employing superintendent as early as possible.

## Certification and Degree Requirements

#### I. Basic Background Requirements

A student must have a minimum of thirty graduate or undergraduate semester-hour credits in general background courses distributed in at least three of the following fields: English, social studies, science, fine arts, mathematics, and foreign languages. Six semester-hour credits in English and six semester-hour credits in social studies will be required.

## II. Subject-Matter Specialization

A student must have a subject-matter background suitable in extent and coverage to constitute a teaching major in at least one field. Evaluation should be done through the certification advisor and departmental advisor.

## III. Professional Requirements

Prior to completion of the Certificate and/or Master's Degree programs, the student must have completed the following professional curriculum. Courses may be waived that have been completed at either the graduate or undergraduate level, prior to enrollment in the program. However, no student will be recommended for a certificate or a Master's Degree who has not completed Student Teaching\* or the Supervised Teaching Seminars at the College.

Ed.	595A	Foundations of Education, Part I	3	s.h.
Ed.	595B	Foundations of Education, Part II	3	s.h.
Ed.		Structure and Organization of American Schools		
Ed.	595D	Curriculum and Methods of Instruction	3	s.h.
		Advanced Educational Psychology		
Psych. 561		Child and Adolescent Development	3	s.h.

Students who successfully complete the Certificate Program will be recommended for appropriate New Jersey teacher certificates if they will notify the Evening Division certification and MAT advisor accordingly.

¹Ed.	403.	Student	Teaching		8 s.h.
²Ed.	595E,	595F.	Supervised	I Teaching Seminar	each

<sup>(1)</sup>Although part of the professional program may be waived on the basis of previous college work, students are admitted to Education 403, Student Teaching, only after completing sufficient preparation at the college to enable the college to assess their potential as teachers and to recommend them to a school district as student teachers. <sup>(2)</sup>Teachers in service on substandard certificates will substitute Education 595E, 595F, Supervised Teaching Seminar. These students will be admitted to the program only with the prior permission of the local superintendent of schools, and agreement with the local school system regarding a program of joint supervision with the college. Unlike Student Teaching, the Supervised Teaching Seminar may be the initial course in the student's program.

# Total Professional Program for Certification26 s.h.D. Additional Requirements for the M.A. degree14 s.h.Ed. 595G. "Action" Research for Teachers3 s.h.Ed. 595H. The Teaching of Communication Skills3 s.h.Electives8 s.h.

Students may choose, with advisement, electives in general education or subject matter specialization.

Selected matriculated students may be invited to develop a Master's thesis of quality under the guidance of a thesis advisor for which four semester hours of elective credit will be allowed.

#### Total Master of Arts (Major in Teaching)

Minimum 40 s.h.

If part of the professional requirements are waived on the basis of previous college work, students may take less than 40 s.h. of work at the College; however, to qualify for the Master of Arts degree, at least 32 semester hours of graduate work must be completed, under advisement, in the Montclair State College Program.

# ADMISSION TO AND REQUIREMENTS FOR THE M.A. DEGREE IN OUTDOOR EDUCATION AND CONSERVATION

Admissions Requirements:

Student must hold a Bachelor's degree from an accredited institution; have a high scholastic average (at least a 2.67 based on a four point scale); hold a N.J. teaching certificate; have an interest in curriculum development; and have a background in elementary education or science, geology, camping, conservation, outdoor education, or related fields.

Most of the courses will be offered on campus at Montclair State College and will be supplemented by offerings at the New Jersey State School of Conservation, Glassboro State College, Trenton State College, and Rutger's College of Environmental Sciences.

A required practicum (Ed. 443 or 444) will be taken at the School of Conservation in Stokes State Forest.

# **Program Outline**

<b>I</b> . Οι	utdoor Education and Conservation	12-18 s.h.
A.	Purpose and Philosophy of Outdoor Education (one course	required)
	Ed. 440 Outdoor Education	2 s.h.
B.	Conservation Workshop (one course required)	
	Ed. 411 Conservation Education	2 s.h.

# 50/EDUCATION

		Sci. 414 (Sci. 415 (	Conserva Conserva	ation in Plants and Animals	2	s.h. s.h.				
	C.	Outdoor R	esources	and Recreation (one course required)						
		Ed. 442	Practicu	im in Camp Leadership	2	s.h.				
				phy of Recreation in School and Community	2	s.h.				
	D.	D. Developing Curriculum Guides, Tools, and Materials for Outdoor  Education (electives)								
				upply and Conservation Problems						
		Ed. 480 I Sci. 405 I	rield So Field an	d Laboratory Studies in Science	2	s.n.				
	E.	Administra	tion and	Development of Outdoor Education Programs	_					
		(one course required)								
		Ed. 443 H	racticui	n in Camping Education and Administration	.3	s.h.				
II.	En	vironmental	Science	12-1	8	s.h.				
	A.	Plants (one	e course	required)						
				Studies of Flowering Plants						
		Bio. 424	Morpho	logy of Flowering Plants	4	s.h.				
		Bio. 425	Element	ary Plant Physiology	4	s.h.				
				hysiologyation of Plants and Animals						
	n				_	5.11.				
	В.			rse required)	_					
				rudies in Science: Biological						
				Prnithology						
				Behavior						
				logy						
	C.	Soil. Miner	als. Nat	ural Resources (one course required)						
	٠.			leontology	4	s.h.				
			415 Cc	onservation of Soil and Water	2	s.h.				
	D.	Air and Wo	ater (ele	ctives)						
			,	ater Supply and Conservation Problems	2	s h				
		Physics 4		eteorolgy						
		Earth Sci. 4								
		4	131 Oc	ceanology and Limnology I and II 2 s.h	. 6	each				
	E.	General (e.								
				eneral Ecology						
			516 Ev	olution	2	s.h.				
				eld and Laboratory Studies in Science						
				eld Studies in Science: Biological						
			413 Fi	eld Studies in Science: Physical	2	s.h.				
		Physics 4		tronomy						
II.	Soc	cial Sciences	s (electi	ves) 2	0	e h				
	300	Sociology	406	Rural Sociology						
		Soc. Studie		Conservation and Rural Economic Life						
		Soc. Studie		Social Studies and Conservation						
		Geography		Field Geography and Conservation						
		Sci.	419	Field Science and Conservation	2	s.h.				
		Sci.	411	Problems in Field Science	2	s.h.				

Pro	ofessional Education and Behavioral Science	2-6	s.h.
A.	Research Methods		
	Ed. 503 Methods and Instruments of Research (required) Ed. 603 Principles and Practices of Research or an appropriate	2	s.h.
	Departmental Research Seminar (required)	. 2	s.h.
B.	Social Problems and Education (electives)		
	Sociology 565 Community Resources and Youth	. 2	s.h.
	Home Ec. 427 The Disadvantaged Family	2	s.h.
	Geography 421 Population Problems of the World	2	s.h.
	Sociology 402 Social Pathologies		
	Sociology 405 Urban Sociology		
	Sociology 406 Rural Sociology		
	Sociology 407 Race and Ethnic Relations in the United States	3	s.h.
C.	Curriculum Development (electives)		
	Ed. 530 Curriculum Construction in Sec. School	. 2	s.h.
	Ed. 535 Organization and Administration of Extra-		
	Curricular Activities	. 2	s.h.
	Ed. 538 Curriculum Construction in Elementary Schools		
	Ed. 539 Seminar in Curriculum Construction	. 2	s.h.
D.	Current Trends and Concerns of Education (electives)		
	Ed. 502 Teaching the Block of Time Curriculum in Junior		
	and Senior High School	. 2	s.h.
	Ed. 505 The Two-Year College	. 2	s.h.
E.	Behavioral Sciences and Education (electives)		
	Soc. Studies 563 Social Movements	. 2	s.h.
	Minimum		s.h.
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#### **GRADUATE COURSES**

Note: Students are not permitted to enroll in courses they have taken previously under other titles and/or other course numbers.

#### Education 501. Tests and Measurements in Secondary Education 2 s.h.

The purpose of this course is to develop an appreciation of the meaning and importance of measurement in education, and to give a working knowledge of instruments of measurement.

# Education 502. Teaching the Block of Time Curriculum in the Junior and Senior High School 2 s.h.

This course concerns the structure, organization, and methods of teaching block of time curricula in secondary schools, after a discussion of underlying philosophy and historical development.

# Education 503. Methods and Instruments of Research 2 s.h.

This course is required of all regularly matriculated candidates for the Master's Degree without regard to their field of major interest. Its purpose is to introduce students of education to research and its practical application to professional problems. The course treats: the nature and types of educational research; methods and techniques of educational research; and the tools used in interpreting statistical data. During the course, the student completes his outline and may complete his research either in this course, in Education 603, or in his departmental seminar or research course, It is recommended that this course be taken rather early in the graduate program. It must precede work in departmental seminar or research courses. Prerequisite: Math. 320, Educ. 501, or equivalent, and M.A. candidacy. Math. 320 does not carry graduate credit.

## Education 505. The Two-Year College

2 s.h.

This course is designed to acquaint the student with the history, purposes, patterns, and trends of the two-year college, including the junior college, the community college, and university extension centers.

#### Education 506. Teaching in the Two-Year College

2 s.h.

This course is designed to examine the instructional problems in public two-year colleges as they are affected by: the student population, the curriculum functions, the organization of the program, and the guidance responsibilities of the teacher. Field study visits to nearby two-year colleges are required.

#### Education 509. Medical Problems in Education

2 s.h.

In this course the role of the educator is studied in relation to the following subject areas: childhood, chronic and contagious diseases; nutritional problems; narcotics; and psycho-socio-medical pathologies. The impact of health problems on the family, school, and community is emphasized throughout.

#### Education 510. Introduction to Educational Administration

2 s.h.

This is the basic course in the organization and administration of the American school system at the national, state, intermediate, and local levels. The purposes and nature of school administration are studied. Other topics surveyed include: the superintendency, personnel problems, records and reports, plant administration, business administration, auxiliary services, administration of curriculum, instruction, guidance, and pupil personnel. Prerequisite: One and one half years successful teaching experience under certification.

#### Education 511. School Business Administration

2 s.h.

Topics considered in this course include: the role of business administration in public education, office management, budgetary procedures, financial accounting, payroll administration, purchase and supply problems, insurance, debt service management, transportation, and food service. Prerequisite: Educ. 510 or equivalent.

#### **Education 512. School Community Relations**

2 s.h.

This course concerns the relation of the school to other educational efforts of the community. It considers the scope and types of agencies and informal influences of an educational nature, and also the agencies and methods by which the best total cooperative effort can be attained. It deals also with methods and plans of publicity. Constant reference throughout is made to New Jersey localities.

#### Education 514. School Law

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After an introductory general study of such topics as: legal theory, the separation of school government from other local government, the appellate function of the State Commissioner of Education and the State Board of Education, the course is concerned principally with a study of New Jersey school laws (Title 18 of the Revised Statutes) and decisions. Prerequisite: Educ. 510 or equivalent.

#### Education 516. School Finance

2 s.h.

After an introductory unit concerned with the current economic environment, this course is devoted to a study of state and local taxation, state school-aid theory and practice, school-district indebtedness, cost-quality relationships, Federal aid, fiscal controls, and the budgetary process. Prerequisite: Educ. 510 or equivalent.

#### Education 520. Administration of the Modern Secondary School 2 s.h.

The following topics are considered: the student personnel, building and revising the high school curriculum, providing for individual differences, making the school schedule, records, the guidance program, pupil participation in government, the extracurricular program, the health program, the safety program, discipline, library and study hall, cafeteria, the principal's office, and evaluating results. Prerequisite: Educ. 510 or equivalent.

## Education 525. Secondary School Building Planning

2 s.h.

This course deals with the education planning of secondary-school buildings. The preparation of educational specifications and space requirements is considered. Topics considered include the planning of offices, classrooms, auditoriums, gymnasiums, laboratories, shops, libraries, cafeterias, and other spaces. Prerequisites: Educ. 520, 530 or equivalents.

#### Education 530. Curriculum Construction in the Secondary School

The purpose of this course is to consider the extent to which the secondary school curriculum meets the needs of a changing civilization, and to consider effective means of curriculum construction. Prerequisite: One and one half years successful teaching experience under certification.

#### Education 531. Middle School Curriculum and Organization

3 s.h.

The emerging curriculum of the rapidly developing middle school is explored. Attention is given to the organization of pupils, instruction, media, and facilities. The influences of recent social changes and educational innovations are emphasized. Students have opportunities to study practices in typical middle schools and to develop instructional strategies.

#### Education 533. Philosophy of Education

2 s.h.

This course acquaints advanced students of education with the main currents of philosophical thought tending to direct education since the turn of the century. It builds a thorough understanding of the James, Peirce, Dewey positions and their critics and interpreters through the 1930's and 1940's. Post war European and American thought as expressed in philosophy, arts, including literature will aid the student to interpret and weigh contemporary trends and discussions of personal and social values, mainly as they influence American education.

#### Education 534. Economic and Political Determinants in N. J.

2 s.h.

This course gives the student a background for interpreting the economic and political forces and trends in the state which have local and state wide implications for all levels of education. Leading state bulletins on these matters are studied, and authorities in the field will be invited to participate. Field trips to industrial and agricultural locations are part of the requirements.

#### Education 538. Curriculum Construction in the Elementary School

2 s.h.

This course offers an opportunity to review state and city elementary curricula: to discuss the principles of curriculum construction; to collect new teaching materials for the various subjects; and to evaluate, organize, and grade these materials. Teaching procedures in the use of materials are discussed and evaluated in terms of pupil needs, the objectives set up, and the results obtained. This course offers an opportunity to make a special study of the materials and procedures to be used in the supervision of the language arts. Prerequisite: One and one half years successful teaching experience under certification.

#### Education 540. Supervision of Instruction

2 s.h.

This course covers the principles and techniques of supervision used in elementary and secondary schools. It describes the role of the supervisor in aiding teachers to adjust to the school environment, and overcome certain personal weaknesses that lower their effectiveness in the classroom. It alerts the student to ways of challenging teachers to new and more varied improvements in teaching methods. It also describes the problem of organizing and administering curriculum changes. The stress is on creating a professional atmosphere of growth for all concerned with instruction. Prerequisite: One and one half years successful teaching experience under certification.

#### Education 541. Supervision in Special Fields

2 s.h.

This course directs the student to the special problems of supervision in a particular subject area at the secondary school level, or to the problems of general supervision at the secondary or elementary school level. Where special supervision activities relating to age groups, materials of instruction, or professional growth and evaluation are unique for the subject area, specialists in these fields will be used as instructors. (Supervision courses offered in other departments may be substituted for Ed. 541.) Prerequisite: One and one half years successful teaching experience under certification.

# Education 550. Guiding the Reading Interests of Secondary School Students: Part I. Materials and Sources 2 s.h.

# Education 551. Guiding the Reading Interests of Secondary School Students: Part II. Needs and Services 2 s.h.

The purpose of these courses is to prepare teachers to discover and improve the reading interests and attitudes of their students. Useful to all content area teachers and specialists who assign recreational and research reading, Part I particularly deals with

fundamental bibliographical tools, the classroom teacher's relationship to the library, current source materials in book evaluation, and techniques for determining book selection. In Part II the teachers write their own book annotations and reviews, establish readability and suitability criteria based on a growing knowledge of child development, help build collections and services for young people which meet their personal needs through reading. (Educ. 550 not open to those who have taken Eng. 547; Educ. 551 may be taken as Part II after Eng. 547.)

## Education 551N. Organization and Administration of Reading Programs 2 s.h.

This course is designed to acquaint the student with the more complex aspects of organizing and administering reading programs. It includes such topics as: theory and techniques of leadership, program development, organization of in-service programs, developing a budget, methods of evaluation, etc. In general, this course is aimed at providing essential background for reading specialists to establish or administer a functional secondary school reading program.

# Education 552. Principles of Reading Improvement in the Secondary School 2 s.h.

This is a course planned to present a deeper picture of the guiding principles and controversial issues which influence the teaching and learning of reading. Organized especially for the subject area teacher and the beginning reading specialist, recent non-clinical research and important professional and lay journals are studied to explore the pendulum of theory and practice in: the organization and administration of developmental reading programs, educational policies which affect reading, child development concepts and reading growth, systematic differentiation of individual needs, and reappraisal of the place of reading in our changing society. (Not open to those who have taken Educ. 556.)

# Education 553. Techniques of Reading Improvement in the Secondary School

This is a practical course dealing with popular techniques useful in the improvement of non-clinical reading difficulties found in the content subjects. Planned especially for the subject area teacher and the beginning reading specialist, a study is made of secondary school reading needs, and specific suggestions are outlined for guiding the slow, average, and gifted student to success in reading up to his capacity in a classroom situation. Through an actual study of the more widely used reading workbooks, films, slides, tachitoscopic instruments, and texts available in the Reading Laboratory facilities, a practical approach is made to building repertoire of reading skills in many areas. (Not open to those who have taken Educ, 430 and 557.)

# Education 554. Case Studies of Reading Difficulties: Part I, Testing 3 s.h.

This is the basic course in learning the techniques that may be used to diagnose reading difficulties. After making a thorough study of the most frequently used tests and inventories, each teacher applies this knowledge to the actual testing of a child with reading problems. Particular attention is given to the unique values of group and individual tests, survey and diagnostic tests, and standardized and informal tests. Practice in case reporting to parents, schools and agencies is undertaken.

## Education 555. Case Studies of Reading Difficulties: Part II, Treatment 2 s.h.

In Part II emphasis is placed on the techniques and treatment which can be effectively applied by the average classroom teacher, thereby, greatly increasing the effectiveness of their diagnostic procedures. Teachers who are conscious of the types of difficulties that children encounter in their school work can do much by "preventive" teaching.

# Education 556. Corrective and Remedial Reading: Part I, Causation 3 s.h.

## Education 557. Corrective and Remedial Reading: Part II, Treatment 3 s.h.

These are causation and treatment courses planned for the teacher and specialist who are involved in some aspect of remedial instruction in reading improvement. Part I offers an opportunity to extend training by investigation and interpretation of the more serious reading problems. A study is made of the constellation of causes of reading difficulties, and techniques of remedial and corrective treatment are projected. In Part II particular attention is paid to the selection and adaptation of suitable improvement devices and curriculum materials. Illustrative cases are drawn from actual clinical experiences by requiring participation in the program of the Reading Laboratory. (Educ. 556 not open to those who have taken Educ. 530A, 558; Educ. 557 not open to those who have taken Educ. 530B and 559.) Prerequisite: Permission is needed to take these courses.

#### Education 558. Field Experience in Reading

2 s.h.

The aim of the course is to introduce the student to various aspects of reading through experience in agencies actually dealing with such problems. Students observe and participate in activities of the agencies to which they are assigned and write full accounts of these observations and experiences. Prerequisites are: experience in teaching, familiarity with literature on all aspects of reading and psychology, Education 552, and permission of instructor. The hours for the conferences are arranged personally by student and instructor.

#### Education 577. Social Case Work

2 s.h.

This course reviews principles in social case work as they relate to the school setting. Study is devoted to the theoretical development of social work norms, and to the function and role of the school social worker (visiting teacher). Cases which have been developed by Social Workers will be studied and experiences in a school setting will be provided.

#### Education 578. Testing and Evaluation in Student Personnel Services 3 s.h.

This course deals with fundamentals of educational and psychological measurements in guidance: test theory, statistical concepts, test construction, evaluation and interpretation. The place of tests in the instructional program is stressed.

#### Education 579. The Use of Tests in Counseling

3 s.h.

This course is designed to familiarize Elementary and Secondary school counselors with techniques for using test results; for interpreting test results to teachers, administrators, parents and students. Implicit in this course will be the use of appropriate statistical analysis to draw conclusions for research and program development. Laboratory techniques will be used to give students practical opportunities to administer, score, and interpret a group of tests. Some time will be devoted to the planning of the testing program for the Elementary and the Secondary School.

Prerequisite: Ed. 578, or equivalent.

#### Education 580. Principles of Guidance

2 s.h.

Topics included in this course cover: philosophy of guidance, history of the guidance movement, the need for guidance presented by children and adolescents. The methods of gathering useful data are studied, and school records, exploratory activities, tests, inventories, the case study approach, occupational information, and occupational data are treated as well as general methods of guidance with special stress on interviewing and counseling of students.

#### Education 582. Vocational Guidance

2 s.h.

This course is intended for counselors in the junior and senior high schools to obtain information about the principles and philosophy of vocational education and the techniques of counseling youths who wish to receive pre-employment training, and for counselors of out-of-school groups who are attempting to make readjustments to occupational life. Attention is also given to guidance techniques for job preparation and readjustment, the matching of educational and personal abilities to job specifications, the effects of social legislation on the employment of youths, and a study of techniques used in determining occupational needs and occupational changes. Prerequisite: Educ. 580.

#### Education 583. Educational Guidance

3 s.h.

This course is concerned with the facilities available for education after high-school graduation, the problem of further training for pupils leaving school before completing high school, and the academic problems of students while in school. A brief survey of colleges and college-admission procedures is made. Prerequisite: Educ. 580.

#### Education 585. Group Guidance and Counseling Activities

3 s.h.

This course is concerned with the various techniques for helping 3 individual pupils and for using group activities including role-playing as a guidance technique. The group activities considered include those of home rooms, activity periods, occupation courses, student field trips, placement follow-ups, college nights, and career days. Prerequisite: Educ. 580.

#### Education 586. Elementary School Guidance Services

3 s.h.

This course is designed for guidance counselors in the public schools with particular emphasis on the guidance services that may be offered in grades kindergarten through six. The guidance program, as established in the public schools, envisions supervision and administration of the guidance program from the kindergarten through graduation at grade twelve. It is important, therefore, that the guidance director understands the services that can be made available to the elementary school. Prerequisite: Educ. 580.

## Education 587. Administration and Supervision of Guidance Programs 3 s.h.

This course is designed to acquaint the student with more complex aspects of the supervision and administration of a guidance program. It includes such topics as: developing and administering programs of student registration (course selection); theory and techniques of scheduling a modern high school; supervisory responsibilities of the director of guidance within and outside of the department; coordinating guidance activities in a multi-school district, etc. In general, this course is aimed at providing essential background for counselors desiring to establish or administer a guidance program in a high school or a multi-school system.

The primary method of study is the examination and evaluation of current guidance practices leading to the formation of proposals for improvement, and possible inclusion, in guidance programs where the student is working as a counselor and/or director. Prerequisite: Education 580 and 6 s.h. in the Guidance Program of the Student Personnel Services M.A. Degree program.

#### Education 588. Techniques of Interviewing and Counseling

This is an advanced techniques course in the counseling of individual students. The directive, non-directive, client-centered, and role playing approaches, as well as the case study methods are studied. Opportunity for demonstration and practice with these techniques are implemented with tape recordings, one way screens, and closed circuit television. Prerequisites: 12 s.h. of work in the M.A. program and permission of the faculty advisor.

2 s.h.

#### Education 589. Student Personnel Services in Higher Education 3 s.h.

This course is a study of the student personnel functions in two-year and four-year colleges. The areas to be included are: personal counseling, financial aid, dormitory management, health program, student activities and social programs; course selection, job placement, college admission and academic retention, administration and supervision of the program.

#### Education 595A, 595B. Foundations of Education: Part I and II 3 s.h. each

This course is organized in terms of current educational issues and topics of interest. It is designed to provide the student with an understanding of the historical, philosophical, and social backgrounds to which an educational item is related and from which it may have evolved. It includes those elements of educational philosophy, educational sociology, and history of education which may be pertinent to the current problem and which will provide the teacher with the necessary perspective to deal with it in an intelligent manner. The topics included in the course are selected in such a way that a large number of basic concepts will be involved.

This course is organized in two parts, three semester hours each, of which either part may be taken prior to the other or concurrently with it.

Open only to M.A. (major in Teaching), certification students, and students in degree programs desiring to work toward initial certification.

## Education 595C. Structure and Organization of American Schools 3 s.h.

This course provides a basic orientation in the following areas of professional concern: (1) The organization and role of the public schools in American Society, (2) The responsibility of Federal, State, and Local Governments for the education of youth, (3) The nature of teaching as a profession, (4) The evolving role of the school in community improvements, and (5) current school practices.

Open only to M.A. (major in Teaching), certification students, and students in degree programs desiring to work toward initial certification.

#### Education 595D. Curriculum and Methods of Instruction 3 s.h

An overview of curriculum is provided. Insight into the role of the teacher in the teaching-learning process is developed. The routine activities and auxiliary responsibilities of the teacher are examined. Students learn about the sources of curriculum materials, and the selection and use of teaching aids. Lesson plans and units of work are prepared for use in the classroom. Through cooperative and/or team teaching, instructors from various college departments assist prospective teachers with specific methods of teaching.

Open to M.A. (major in Teaching) certification students and students in degree programs desiring to work toward initial certification.

## Education 595E, 595F. Supervised Teaching Seminar 4 s.h. each

This seminar is provided for in-service teachers employed on an emergency or provisional certificate and is open to students participating in the "approval" certification program or the Master of Arts in Teaching Program. Arrangements are made with the employing Superintendents of Schools for joint supervision of the in-service teacher by local school and College officials. The student will assume full teaching responsibilities and will meet periodically at the College for a complete academic year.

In this seminar students have an opportunity to examine their teaching materials and techniques and to share their experiences with other beginning teachers. Cooperating local school personnel and supervising instructors assist the new teachers with their on-the-job problems.

(Open to M.A. [major in Teaching] and certification students only.)

#### Education 595G. "Action Research" for Teachers

3 s.h.

This course is designed to provide teachers with an understanding of the basic principles and techniques of research which are applicable to their classroom situations. Examples of various kinds of classroom research, both of an individual and group nature, are studied and analyzed. Practice is provided in the planning and outlining of specific research projects, the development of experimental designs, and the evaluation of the structure and outcomes of classroom research. Each student develops, in detail, a plan for a research project which he might be interested in undertaking in his own classroom.

(Open to M.A. [major in Teaching] and certification students only.)

#### Education 595H. The Teaching of Communication Skills

3 s.h.

The role of communication skills is of major importance in the learning process. Every teacher should be aware of the abilities, limitations, and needs of students in this area, the adaptations that must be made in curricula, assignments, and classroom procedures to the levels of the students in a classroom, and the remedial measures that might be taken to improve their status. These communication skills include the specific areas of speaking, listening, reading, and writing. Instructors from the departments of Speech, Reading, and English are involved in this course. The endeavor is made to have the students gain an understanding of the basic principles in each of these fields and their relationship to the teaching of any subject.

(Open to M.A. [major in Teaching] and certification students only.)

#### Education 601. Workshop in Education

2 or 4 s.h.

Section A - Administration

Section B — Supervision

Section C - Curriculum

Section D - Guidance

Section E - Psychology

The workshop course enables the graduate student to devote his time to an educational topic or school problem of current interest to him and to secure the help of the staff, fellow students, and college facilities in pursuing this study. Members of the workshop may meet together to discuss matters of common concern in respect to the current school situation. In addition, the student works independently on his own subject and at times meets with a small group interested in the same area.

In the past, students have worked on topics in such areas as these: problems in administration, guidance programs, extracurricular activities, school philosophies, problems in supervision, curriculum planning, and community relations. The success of the workshop depends much upon the student knowing what he wants to accomplish; the procedure being flexible enough to support his purposes. He must have his proposed problems for study approved by the Director of the Workshop before he enrolls for the course.

The workshop is divided into five sections, as noted above. The student may enroll for four semester-hours of credit or for two, the four calling for two periods of scheduled time in the course daily, the two calling for one period of scheduled time in the course. The student taking the course for two credits enrolls for one of the five fields. The student taking it for four credits may do all the work in one of these five fields, or he may enroll for two hours of credit in one and two in another.

#### Education 602. Research Seminar in Guidance

2 c.h.

This course is designed to provide a laboratory situation for the exploration and study of present practices in student personnel work. The major portion of time is spent in private investigation and research. Prerequisite: Education 580, 503 and 10 semester hours graduate work in the Student Personnel Services Program.

#### Education 603. Principles and Practices of Research

The purpose of this course is to give students an opportunity to collect, analyze, and interpret data; to state the findings; to draw conclusions and generalizations; to write a research report together with an abstract; and to give an oral report.

This is an elective course in educational research. It may be substituted for a departmental research seminar upon the approval of both the departmental advisor and the chairman of the Education Department.

#### Education 604. Field Work in Guidance

2 s.h.

The aim of the course is to introduce the student to various aspects of guidance through experience in agencies actually dealing with such problems. Students observe and participate in activities of the agencies to which they are assigned and write full accounts of these observations and experiences. Some time is spent in discussing and evaluating these experiences and relating them to the literature of the subject. Prerequisite: Education 580 and 10 semester hours graduate work in the Student Personnel Services program.

# Education 605. Research Seminar in School Social Work (Visiting Teacher)

2 s.h.

This course will provide research tools to enable the student to construct and implement an original inquiry that shall be deemed by the instructor to be a singular contribution to the field. (prerequisite: Ed. 503)

#### Education 606. Practicum in Guidance Services

2 or 4 s.h.

This course is designed to be a final summation of the counselor's preparation. It includes: investigation of programs in practice; development of guidance programs to meet specific school needs; evaluation of student personnel services. Prerequisite: Completion of a minimum of 20 s.h. in the Student Personnel Services program.

#### Education 607. Field Work in School Social Work

2 s.h.

The student will be provided with an opportunity to participate in school social work in an actual school situation. Diagnostic skills, interviewing techniques, case recording, individual and group therapy and the team approach will be observed and discussed. Under the guidance of a certified, experienced school social worker, the student will develop an understanding of the use of community resources. The student will be given an opportunity to observe special services (school social worker, psychologist, psychiatrist, speech or reading specialist, and teacher) in action as together a therapeutic plan is developed for the school pupil.

#### Education 628. Field Experience in Administration and Supervision 2 s.h

Students are assigned to a particular junior or senior high school, where under the guidance of a school administrator or supervisor they carry out certain functions of these positions. A college staff member acts as coordinator and supervisor of this activity by visiting the school and consulting with the student, observing him, in action and plans with the school personnel for improvement and evaluation of the students work.

# Education 629. (529) Research Seminar in Secondary School Administration

2 s.h.

In this course the class makes an intensive study of administrative and supervisory problems suggested by the educational events and trends of the year, by the interests and responsibilities of the members of the class, and by educational movements in New Jersey and the country. Each student does an individual piece of research which he reports to the class. This represents advanced work which depends upon previous study or experience in educational administration or supervision. Prerequisites: Educ. 503, 520 and 540 or equivalents.

#### Education 639. (539) Research Seminar in Curriculum Development 2 s.h.

This course is for students actively engaged in problems of curriculum reconstruction and for those who are anticipating committee work in this field. It concerns both the elementary and secondary levels. Each student does an individual piece of research which he reports to the class. This represents advanced work which depends on previous study in the curriculum area. Prerequisite: Educ. 503, 530 or 538.

#### Education 659. Research Seminar in Reading

2 s.h

The course is designed to provide a laboratory situation for the exploration and study of problems in the field of reading that have been suggested by the educational events and trends of the year, by the interests and responsibilities of the members of the class, and by educational movements in New Jersey, the country, and the world. Each student will execute an individual research effort which he reports to the class.

#### SENIOR-GRADUATE COURSES

Most of the following courses are set up to serve graduate students as well as College seniors. To carry graduate credit, the course in question must be approved by the candidate's advisor.

#### Education 403. Supervised Student Teaching

8 s.h.

Ten weeks of student teaching in the public schools of New Jersey. The purpose of student teaching is to give the student an opportunity to relate theory to practice under skilled supervision; to offer a chance to evaluate his own strengths, weaknesses, and personal and professional needs; and to determine his readiness for responsible membership in the teaching profession.

#### Education 406. Educational Sociology

3 s.h.

This course deals with the application of sociological principles to educational problems. The school is treated as a part of the community, and the various social forces that affect the school and its administration are considered. The following topics are included: family backgrounds, community organization, social breakdown, social mobility, socialized classroom methods, and the social approach to individual behavior difficulties.

#### Education 408. Selection and Utilization of Audio-Visual Materials

s.h.

Sources, selection, and evaluation of audio-visual aids are studied in this course. Techniques in developing individual reference catalogs of audio-visual aids are stressed. The production of school-made aids is also an important aspect of the course. The use of the latest audio-visual equipment is demonstrated.

#### Education 410. Teaching Materials Workshop

2 s.h.

This course is for those persons who wish to study advanced problems in the utilization and administration of audio-visual materials. Individual research is stressed, and there is an opportunity to work out individual projects. Such problems as budget requirements, administrative set-up, establishment of film libraries, etc., are emphasized. It is assumed that the student will have taken Educ. 408 or will have had the equivalent in practical experiences.

#### Education 412. Seminar and Practicum in Adult Education

3 s.h.

This course is designed to develop awareness, skills, and understandings in the teaching of adults, with particular attention focused upon working with the educationally disadvantaged young and older adult. Through lecture-discussion, demonstration, and practicum experience, the course participant will be able to become more aware of the developing new approaches to guiding learning experiences for the adult.

#### Education 420. Instructional Innovations

3 s.h.

This course will attempt by means of individual study, group discussions and projects, classroom demonstrations, field trips, and video tapes to acquaint the student with the rapidly developing innovative practices in teaching. It will be organized on a team teaching basis. The following topics will be considered: (1) the teacher and his staff—team teaching planning and organization, teacher assistants, and flexible scheduling; (2) independent study—planning and organization, independent study skills, and resource centers; (3) technology of instruction—programmed instruction, instructional computer programs, teaching machines, microfilms and microfiche, and audio-visual devices and materials; (4) group dynamics—group relationships and interactions, leadership, applications to teaching; (5) curriculum adaptations—phasing, cycling, individualized instruction; and (6) student evaluations—purposes and practices, instrument construction, records and reporting.

#### Education 423. Teaching in Urban Schools

3 s.h.

This course includes: an introduction to the socio-economic setting within which the inner-city schools exist; a study of the specific problems which the students bring to the school because of their family backgrounds; the inner-city system as seen through the eyes of administrators, teachers and special personnel (guidance, medical staff, specialists in remedial work); recent theories and practices in teaching such students; plans and programs for change offered by individuals, groups and agencies concerned with change; recent innovations in funding; ideas for reorganization of the schools and the school systems; and the need for the reorientation of the teachers now in such schools.

#### Education 430. Interaction Analysis

3 s.h.

This is a course in the investigation of and experience in the problem of objectifying observable pupil-pupil-teacher relationships during the teacher-learning process. Students will develop skill in analysis through use of tapes and observation of elementary and secondary classes.

#### Education 431. Individual and Group Dynamics

3 s.h.

This course is a seminar laboratory experience designed to meet the needs of teachers, administrators, and supervisors in the areas of self understanding and effective human relationships. Focus is on individual behavior in learning groups and in supervisory conferences. Participation in actual group process provides opportunity for development of insight into the effects of one's behavior on others.

#### Education 436. Curriculum and Methods in Sex Education

2 s.h.

This is a course in which students will develop curriculums to fit into their individual schools. Methods for implementing these curriculums will be demonstrated, and current texts and audio-visual materials will be analyzed.

#### Education 440. Camping and Outdoor Education

2 s.h.

The purpose of this course is to familiarize the students with camping and outdoor education as educational methods utilized by the schools of America. The aims and methods of camping are studied, and consideration is given to the communities that have active camping and outdoor education programs in operation. The course also helps prepare the student for a position in summer camps. This course is usually given at the New Jersey State School of Conservation, Stokes State Forest.

#### **Education 441. Conservation Education**

2 s.h.

This course is designed to give teachers and prospective teachers a background for organizing and teaching conservation on various grade levels. The need for conservation, the various kinds of natural resources, and some of the modern methods for using and renewing these sources are considered. Field trips, laboratory experiences, visual aids, printed materials, and visiting specialists combine to make this a useful introductory course for all teachers.

#### Education 442. Practicum in Camp Leadership

2 s.h.

In this course the student has an opportunity to learn the techniques of camp leadership through practical experience, guided group study, and discussion. The practical experience comes through serving as a camp counselor in an actual camp situation. During this practical experience there are regular discussion sessions and assigned readings which help the student to gain a background of knowledge to help deal with the practical problems as they arise.

#### Education 443. Practicum in Camping Education and Administration 3 s.h.

This course is designed to provide practical experience in the identification and solution of problems arising in camp administration. Among the phases considered are discussion of current practices at both private and institutional camps. Interpretation of educational philosophies and objectives as they relate to camping, finances, personnel selection, waterfront organization, food purchasing, staff supervision, sanitation, health and safety, camp management, records and reports, insurance, kitchen management, maintenance, and other phases of camp administration. Practical application is provided through the techniques used in the children's demonstration camp. Prerequisite: Educ. 440 or permission of advisor.

#### Education 444. Practicum in Conservation Education

2 s.h.

This course is designed to provide teachers and supervisors with a background of experience and knowledge which will enable them to organize and to conduct conservation education programs in their own communities. Using an extensive library of conservation educational material, students formulate teaching units, lists of teaching aids, and projects suitable for use in their own communities. Participating in conservation projects with the children in the demonstration camp furnishes a practical background for research and discussion. Prerequisites: Educ. 441, Science 412, Science 413, or the equivalent.

#### Education 451. Guidance for the Classroom Teacher

3 s.h.

This course is designed as an introduction to the field of guidance for teachers who are concerned with problems of guidance and human relations in the classroom. This course is also designed to give the new teacher a picture of the place of guidance in the modern school, to indicate what guidance is and what is not, to indicate the techniques by which guidance is accomplished, and to identify some of the tools of the guidance counselor. (Cannot be used for credit toward the Master's degree in Student Personnel Services.)

#### Education 461. The Junior High School Curriculum

3 s.h.

Recent trends in the development of the junior high school curriculum and the relation of the curriculum to the aims, function, and organization of the junior high school are covered. Curriculum patterns in representative junior high schools are studied and evaluated. An opportunity is given to each student to develop units of work for junior high school subjects in the major of his choice.

#### Education 462. Survey of Reading Methods in Secondary School Subjects 3 s.h.

Planned especially for the inexperienced teacher in all subject matter areas, this introductory course outlines the role good reading plays in achieving both academic and personal success in every aspect of school life. New teachers will want an overview of: the physiological, psychological, and sociological factors in reading; resources available to the reading-minded teacher; and the school's responsibility for helping the student build an inventory of reading skills by utilizing reading opportunities in the entire curriculum.

#### Education 463. Reading and the Improvement of Study Skills

3 s.h.

This is a course in "How to Study" designed to prepare teachers to help junior-senior high school students achieve greater effectiveness in their reading-study habits. After examination of recent materials and research the class develoops a series of practical methods for teaching and learning: the SQ3R approach, the best methods for taking examinations, the application of reading to problem solving, the development of memory and concentration, and the various techniques for taking and organizing reading notes, and the reading of homework assignments.

#### Education 464. Foundations of Reading Instruction

3 s.h.

Good first reading is of primary importance in the sequential development of reading skills which extend into the junior and senior high school. In this course methods and materials currently in use in elementary reading programs are studied with a view toward increasing the power of both the teacher and the learner. How the reading process begins, and how it is reinforced are topics fundamental to all upper grade teachers who are faced with the problem of continuing reading skills development in all curriculum areas.

## Education 465. College Reading and Study Improvement Laboratory 3 s.h.

This workshop course is designed for those college students who feel that reading-study problems are interfering with their normal school progress. Students engage in supervised practice experiences which promote vocabulary growth, more flexible reading speeds, comprehension and recall improvement, skimming competency, and better interpretative and critical reading techniques. Particular attention is given to reviewing for examinations, keeping up with daily reading assignments, taking notes, and organizing the reading content into main and sub-topic structure. Students may volunteer for this course or be recommended by a faculty member.

## Education 466. Diagnosis and Treatment of Secondary School Reading Problems

3 s.h.

This is a course designed to introduce teachers to the problems of the handicapped reader. Following an examination of recent materials and research, the class develops a representative repertoire of methods for evaluation and correction. Prerequisites: Educ. 464 or equivalent.

#### Education 472. Elementary School Curriculum

3 s.h.

This course acquaints the college student with the subject-matter of the elementary school curriculum for grades 3-6 inclusive. In addition the following are studied: (1) correlation among subjects; (2) the appraisal and use of textbooks; (3) the use of visual aids; (4) the methods adapted to each subject; and (5) use of course of study materials.

#### Education 473. Elementary School Language Arts

3 s.h.

This course gives an overview of modern practices that are used in teaching reading, creative writing, speaking, spelling, and handwriting in the elementary grades. Students are helped to recognize and to make provision for readiness for learning in these areas, to learn or devise various techniques that will meet the needs of different children and situations, and to evaluate, select, and create suitable materials to be used at various maturity levels. Special emphasis is placed on the functional use of the language arts in the total curriculum and life of the elementary-school child.

#### Education 480. Field Science for Elementary Teachers

2 s.h.

Working in a natural setting, rather than an artificial laboratory, this course stresses first-hand experience with natural phenomena and suggests what can be done to convey an understanding of these things to the elementary school student. In developing an understanding of natural resources consideration is given to such areas as rocks and minerals, plant and animal life, astronomy, weather, and all outdoor phenomen, both physical and biological. If desired, collections are made under supervision and some latitude is provided for individual specialization in some phase of field science. The student needs no formal scientific background for this course. Methods of teaching on the elementary school level as well as subject matter content are included. Simple demonstrations, experiments, collections, acquisition of free and inexpensive materials, reference publications, and the most recent methods and trends in field trip procedure are considered.

#### Education 492. Comparative Education

3 s.h.

The educational systems of certain selected countries of Europe, Asia, Africa, and Latin America are studied in an attempt to gain insight into the essential qualities of American education. In this process the relationship between the educational system of each culture and its history, economy, and political and social organization should emerge. Factors causing progress and change in education since 1900 are observed.

## Education 493. Recent Trends in European Education

6 s.h.

This is a field-study course covering a period of approximately six weeks of seminars and of observation and visitation to school systems in Western Europe. Present educational policies and practices in selected European countries are studied with particular reference to economic, political, and social forces shaping their cultures. Similarities and contrasts among European and the American educational systems are analyzed.

## DEPARTMENT OF ENGLISH

Graduate Advisor: MR. JAMES P. PETTEGROVE

Graduate study in the Department of English is designed:

- 1. To broaden the understanding and appreciation of the culture of the Western World through extended study of the literature of Great Britain and the United States, of those European nations which have contributed much to the American heritage, and of those Oriental and other nations now exerting an increasing influence upon the modern world.
- 2. To examine the function of the English language in the modern world through study of its historical development, its psychological nature, its critical expression, and its practice in language communication.
- 3. To enrich the professional background of English teachers through investigation of research and experimentation designed to improve instruction in English in the secondary school.
- To foster, generally, the function of the liberal arts, stressing both individual abilities for self-improvement and individual responsibilities for social awareness.

#### REQUIREMENTS FOR THE M.A. DEGREE IN ENGLISH

## **Admission to Program**

A student with an undergraduate major or minor of at least 24 semester hours in English is admitted subject to general College graduate admission requirements as stated elsewhere in this catalog.

I. Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h.

II. Specialization

11-20 s.h.

A. American Literature

2-4 s.h.

From the following courses: Eng. 525, 529, 533, 537, 538, 543, 546A, 546B, 546C, 546D, 441, 442, 461, 462.

B. English Literature

4-6 s.h.

From the following courses: Eng. 501, 502, 503, 504, 506, 508, 509, 510, 518, 521, 524, 531, 532, 535, 540, 544A, 544B, 544C, 422, 423, 431, 433, 441, 442, 461, 462.

C. World Literature

2-4 s.h.

From the following courses: Eng. 500, 511, 513, 514, 520A, 520B, 522, 526, 527, 528, 530, 534, 536, 539, 548, 453, 454, 461, 462.

D. Language and Communication

2-4 s.h.

From the following courses: Eng. 507, 512, 516, 517, 523, 541, 408, 409, 419.

In addition to or in lieu of English courses in Language, courses in Speech (Speech: 550, 565, 410, 435, 448, 449, 456, 461A, 461B, 462, 466, 468 and/or courses in Reading Educ.: 550, 551, 552, 553) are acceptable, especially if the candidate wishes to augment his skill as teacher of Speech or Reading along with his English teaching.

## E. English Research Writing

2 s.h.

English 603 is required of all candidates for the degree. The subject of the research will determine the area of specialization (American Literature, English Literature, World Literature, Language and Communication) to which this course is assigned for credit.

F. Modification in the above specialization requirements may be made with the approval of the Graduate Advisor.

#### III. Free Electives

6-8 s.h.

## IV. Comprehensive Examination

To receive the degree of Master of Arts in English, each candidate must pass a written comprehensive examination in March before the granting of the degree at the June Commencement or in October.

This examination is designed to test the candidate's mastery of the History of Literature, the techniques of literary expression, technical matters of writing, and Linguistics. He will also be expreted to have a knowledge of the professional skills needed to teach these various aspects of English.

This mastery is partly obtained from the courses taken leading to the degree; largely, however, the candidate must assume the responsibility of preparing himself independent of courses. He is expected to keep informed about current literary and teaching items of importance.

Sufficient choice is provided so that each candidate should be able to find a sufficient number of questions related to his complement of courses to meet the required number of answers.

Each candidate who has declared to the Graduate Office his readiness to take the examination, given only once a year in the Spring Semester, will be notified of date, time, and place.

Minimum: 32 s.h.

#### **GRADUATE COURSES**

## Eng. 500. Greek Classical Drama

2 s.h.

All of the extant plays of Aeschylus, Sophocles, Euripides, and Aristophanes are studied in detail. Attention is devoted to usage of Greek mythological material, to dramatic structure, and to the philosophy of each author.

#### Eng. 501. Anglo-Saxon

2 s.h.

Both the literature and the language of the Anglo-Saxon era are stressed. Specimens of alliterative poetry, including excerpts from Beowulf and of religious prose and The Anglo-Saxon Chronicle are read as literary art and as milestones in the history of English writing. Structure and vocabulary are investigated as the pedestals upon which rests the edifice of modern English.

#### Eng. 502. Victorian Poetry

2 s.h.

The most important English poets who wrote during the transition from the Victorian to the modern period are read, analyzed, and discussed: Rossetti, Swinburne, Hardy, Bridges, G. M. Hopkins, Francis Thompson, A. E. Housman, Kipling, and Yeats.

#### Eng. 503. Geoffrey Chaucer

2 s.h.

Some of the works of Chaucer are studied intensively, while others are read rapidly, so that the student may acquire a broad general understanding of Chaucer's place in the history of English literature as well as facility in reading and interpreting the medieval text.

#### Eng. 504. Elizabethan and Jacobean Dramatists

2 s.h.

This course deals with the men who inspired and rivaled Shakespeare, Marlowe, Dekker, Chapman, Jonson, Beaumont and Fletcher, Webster, and Ford are read for their own sakes and for the light they throw upon Shakespeare.

## Eng. 506. John Milton

2 s.h.

The understanding and evaluation of Milton's poems are primary aims. Contributory are the following: Milton's literary heritage and influence, his position of leadership in the Puritan struggle for civil and religious liberty as revealed in his prose writings, and biographical materials.

#### Eng. 507. Critical Writing

2 s.h.

This course is primarily an examination of critical articles relating to major literary figures. Besides reacting to these examples of literary opinion and scholarship, students are asked to develop a consistent set of critical principles and to apply these to the work of some outstanding author.

## Eng. 508. English Renaissance Non-Dramatic Poetry

2 s.h.

Poetry from Skelton through the Metaphysical poets is studied. Attention is given to sonnet sequences, broadside ballads, miscellanies, and prosody.

#### Eng. 509. English prose Writers of the Nineteenth Century

3 s.h.

Influential prose writers of the nineteenth century, such as Carlyle, Macaulay, Ruskin, and Arnold are examined in detail. Their effect on the intellectual temper of the century is emphasized.

#### Eng. 510. Samuel Taylor Coleridge

2 s.h.

Since Coleridge reflects all the cultural currents of the Romantic era, this course approaches the aesthetic and intellectual life of that age through the poems, essays, lectures, philosophical writings, and letters of Coleridge. It also considers portions of the vast body of Coleridge scholarship.

#### Eng. 511. The History of Literary Criticism

2 s.h.

Great critics from Aristotle to I. A. Richards and T. S. Eliot are reviewed. Four major critical orientations are explored to bring modern criticism into focus.

#### Eng. 512. The Growth and Structure of the English Language

Concerned with the historical background necessary for an understanding of the English language as it is spoken and written today, the course emphasizes the following areas of study: the nature and origin of language; the ancestry of English; the early growth of English; sources of the vocabulary and the making of words; changing meanings and values of words; syntax and usage; concern with dictionaries, spelling, pronunciation, variations, and standards in the modern period.

#### Eng. 513. The Renaissance

2 s.h.

This course deals with Petrarch and the Humanists; Boccaccio and the Novelle; Machiavelli and The Prince; Cellini and the Autobiography; Castiglione and The Courtier; Boiardo, Pulci, Ariosto, and the romantic epic; the drama; Rabelais and Gargantua and Pantagruel; Ronsard and the French Pleiade; Cervantes and Don Quixote; the art of DaVinci, Botticelli, Michelangelo, Raphael, Titian, and others; and the House of the Medici, Savonarola, the Popes.

#### Eng. 514. Origin and Development of the Arthurian Legend

2 s.h.

This course deals with the vague and tentative beginnings of the Arthur story in early chronicle legend; with Geoffrey of Monmouth's pseudo-historical and Chretien de Troye's romantic treatments; with the great medieval recapitulations of Gottfried von Strassburg, Wolfram von Eschenbach, and Sir Thomas Malory; with the Victorian retellings of Tennyson, Arnold, and Morris; with the musical adaptations of Wagner; and with the modern versions of E. A. Robinson. It includes a detailed history of the development of the legend in its diverse forms.

#### Eng. 516. Language Problems in the English Curriculum

2 s.h.

The purpose of this course is to enrich the student's sensitivity to an understanding of language. Theories of language and the cultural histories of words are reviewed and applied to the problems of reading, composition, and speech. The course is conducted as a seminar.

#### Eng. 517. Recent Research and Experiment in the Teaching of English 2 s.h.

Recent experiments in methods of teaching English, and current research in the fields of language, literature, and composition are examined and evaluated. The purpose of this examination is to throw light on problems of teaching English in the secondary school, and to indicate the helpfulness of trends and developments.

## Eng. 518. The Major Romantic Poets

2 s.h.

The poems of Wordsworth, Coleridge, Byron, Shelley, and Keats are emphasized. Pre-Romantics—Blake, Burns, and Scott—and minor Romantics are considered. Poetic theory as enunciated by the poets themselves is studied.

## Eng. 520A and 520B. Great Books on Education

2 s.h. each

Students examine the classics dealing with educational theory and practice which they so often read about but rarely consult.

Part A deals with Plato's Republic, Xenophon's Cyropaedia, Cicero's De Oratore, Castiglione's The Courtier, Machiavelli's Prince, Rabelais's Abbey of Theleme, Ascham's Schoolmaster, Bacon's Novum Organum, Defoe's Projects, Milton's To Samuel Hartit on Education.

Part B deals with Rousseau's Emile, Byron's Don Juan, Hughes' Tom Brown's Schooldays, Newman's Idea of a University, the Arnold-Huxley debates, and the works of John Dewey and Jacques Barzun.

This course is recommended for graduate students in the Department of Education.

#### Eng. 521. English Literature of Social Problems

2 s.h.

Social problems implicit in all literature are considered. Special emphasis is placed on authors who were keenly aware of the social implications of their work. Langland, Chaucer, Shakespeare, Jonson, Milton, Swift, Fielding, Smollett, Dickens, Carlyle, Galsworthy, Wells, and Shaw are among the writers read and discussed.

#### Eng. 522. Contemporary European Literature

2 s.h.

"Contemporary" is here defined as the period from the end of World War I to 1960. The great writers on the Continent, of this period—Gides, Proust, Mann, Kafka, with others—will be read extensively, and discussed intensively.

## Eng. 524. Contemporary British Literature

2 s.h.

Important British literary contributions since 1945 are studied, as they reflect recent history, trends and philosophies. Included are writers such as C. P. Snow, Joyce Cary, George Orwell, William Golding, and Iris Murdoch.

#### Eng. 525. The Development of the American Novel

3 s.h.

The American novel from 1789 to the present is examined. Beginning with the novels of the early Nineteenth Century, the course traces the rise and development of the Romantic and Realistic novel and concludes with an example of American Naturalism. Written criticism of five novels is required.

## Eng. 526. Theory of the Novel as a Literary Form

2 s.h.

Henry James said: "The novel is the most prodigious of literary forms." Yet only beginning with himself, about 1880, did a systematic treatment of the origin, development, and craft of the novel begin to appear. Criticism today is doing for the novel what Aristotle's *Poetles* did for Greek tragic drama, and what Coleridge and Wordsworth did for modern poetry. Prerequisite: A course in the History of the Novel.

#### Eng. 527. The Major Philosophies of Life

2 s.h.

Man's cultural evolution reveals six or seven basic philosophies of reality and life. Illuminating correlations between individual temperaments, cultural epochs, and styles of living, will be shown. Designed to stimulate the student to apply discussions and readings to his own life and culture.

#### Eng. 528. New Perspectives in World Literature

2 s.h.

Literatures of the Orient, the Middle East, Africa, and South America are read and interpreted in relation to Western World Literature to create a world perspective through understanding of the interrelations of literature.

#### Eng. 529. The Development of American Poetry

2 s.h.

A survey is made of the complete sweep of American poetry from the earliest times to the present. Attention will be given to all major patterns, movements, and other literary developments.

#### Eng. 530. Dante and His Influence in England and America

2 s.h.

Fully two-thirds of this course is devoted to rereading and reassessment of Dante in English translation. When Dante's meaning has been revealed, his continued influence from Chaucer through Sackville, Spenser, and Milton to Rossetti, Longfellow, and T. S. Eliot becomes the subject of investigation.

#### Eng. 531. Seventeenth Century English Literature

3 s.h.

The style and content of such prose writers as Bacon, Burton, Walton, Hobbes, Bunyan, Pepys, and Dryden are investigated. Similarly, the poetic expression of experience in Donne, Jonson, Herbert, Herrick, Cowley, Vaughn, Suckling, Lovelace, Waller, and others is studied.

## Eng. 532. The Victorian Novel

2 s.h.

The novel of Victorian England is studied intensively. A review of the development of the English novel before this period is followed by studies in the works of Dickens, Thackeray, Eliot, Trollope, Meredith, and Hardy. Special attention will be given to novels suitable for high school study.

## Eng. 533. Masters of American Literature

2 s.h.

Significant American writers, such as Bryant, Emerson, Franklin, Howells, Irving, Melville, Poe, Twain, and Whitman, are studied to discover their contributions to American life and to reveal important forces in our national background.

## Eng. 534. Medieval Epic, Saga, and Romance

2 s.h.

The chief medieval epics, sagas, and romances translated into modern English from the literatures of England, France, Germany, Ireland, Iceland, Wales, and Italy are reviewed. Attention is given both to those narratives which reflect the life of a particular country and to those which are international and express more generally the spirit of medieval Europe.

#### Eng. 535. Eighteenth Century English Literature

2 s.h.

Major essayists, poets, dramatists, novelists, and letter writers are read and evaluated in terms of the thought, life, and literary movements of their own time and in terms of their significance for the present generation. Authors studied include Addison, Steele, Defoe, Swift, Goldsmith, Sheridan, Gray, Johnson, Boswell, Cowper, Richardson, Fielding, Sterne, Smollett, and Gibbon.

#### Eng. 536. Philosophy in Great Literature

2 s.h.

The study of a few masters of literature, such as Dostoievski, Tolstoy, Mann, Proust, aims at giving the student a deeper insight into the life-views and world-views which have shaped the consciousness of modern Western man.

#### Eng. 537. American Drama in American Democracy

2 s.h.

Plays produced on the American stage from Colonial to contemporary times are read and studied to illustrate the development of democratic concepts.

#### Eng. 538. American Literature of Social Problems

2 s.h.

American literature reflecting social problems from 1800 to 1914 is surveyed to discover the attitudes of various authors toward these problems. Such authors as Cooper, Lowell, Thoreau, Whitman, Howells, Bellamy, Garland, and Glasgow are studied from this point of view.

#### Eng. 539. Theater and Society

2 s.h.

Dramatic expression from ancient Greece to the present is studied to observe and appreciate social, political, and ethical trends reflected in the drama. Social trends in contemporary drama receive special attention.

#### Eng. 540. T. S. Eliot

2 s.h.

All of the works of Eliot-poems, plays, and critical essays-will be read. A survey will be made of his influences on his immediate circle, on the poets and critics of the Nashville Group, and on the New Criticism. The reasons for his dominating position in the world of English and American letters during forty-odd years will be assessed.

#### Eng. 541. The New Grammar

2 s.h.

New grammatical theories are introduced. The most essential details of structural and generative grammar are contrasted with traditional syntax. The relationship between a knowledge of grammar and the ability to write is evaluated in terms of teaching methods.

## Eng. 543. Contemporary American Literature

2 s.h.

Major authors and literary movements in contemporary America are studied. Writers of prose, poetry, and drama are included.

## Eng. 544A Shakespeare, Tragedies

3 s.h.

This course deals with the tragedies. Shakespeare's development as a writer of tragedy, his concept of the tragic, and the diversity of characters who embody this concept are studied in the light of critical traditions and the history of Shakespearean stage production.

## Eng. 544B Shakespeare, Comedies

3 s.h.

This course deals with the comedies. Shakespeare's development as a writer of comedy, his masterful understanding of the large function of comedy, and the variety of situations and characters exhibiting this function are critically studied.

#### Eng. 544C Shakespeare, Chronicles

2 s.h.

This course deals with the English chronicle plays and with Roman plays. Shakespeare's use in history in these plays is considered first as history and then as history presented dramatically and poetically.

## Eng. 546A, 546B, 546C, 546D, 546E. Giants in American Literature: Hawthorne, Henry James, O'Neill, Faulkner, Melville 2 s.h. each

A careful comprehensive study will be made of one of these giants of American Literature. Emphasis will be placed, not only on the significance of his individual works, but also on his influence on American thought and literary patterns. Each of these authors will be considered for an entire course.

#### Eng. 548. Fiction as an Image of World History

2 s.h.

A sequence of historical and cultural novels is presented to give insight into the epochs involved. Great historical novels pertaining to Hebrew, Egyptian, Greek, Roman, Medieval, Renaissance, and modern times are discussed.

#### Eng. 603. English Research Writing

2 s.h.

This seminar course is designed primarily to provide an opportunity for graduate students in English to investigate and apply the techniques of research in the English field. Prerequisite: Educ. 503.

#### SENIOR-GRADUATE COURSES

#### Eng. 408. Advanced Creative Writing

3 s.h.

The nature of the creative process in the arts in general is studied as it relates to creative writing. Through work on an extensive creative writing project, the student's creative writing ability is further developed. Methods of teaching creative writing are studied. Prerequisite: Eng. 104, or equivalent.

## Eng. 409. Playwriting

2 s.h.

Lectures and discussions focus on the nature of dramatic dialogue, on problems of form and structure, and, most importantly, on the part which a script plays in a total dramatic production. There is opportunity for exercises in writing dramatic scripts, from the brief skit to the one-act play.

#### Eng. 419. Theories and Teaching of Grammar

3 s.h.

The new linguistics approaches to the study and teaching of English grammar are introduced and a survey presented of the extent to which the "new" grammar is being programmed for grade and secondary schools. The rules of grammar and writing proficiency are related so that the future teacher may be enabled to secure better response from his students.

## Eng. 422. Survey of British Literature to 1798

3 s.h.

All forms of British Literature, except drama and fiction, from the beginnings to the triumph of romanticism in 1798, are systematically surveyed. Chronology, development, and the transmission of influences and traditions through the centuries are studied.

#### Eng. 423 Survey of British literature, 1798 to Present

3 s.h.

Principal authors together with trends and developments in English Literature are surveyed, Prerequisite: Eng. 422 or equivalent.

#### Eng. 431. The Age of Chaucer

3 s.h.

The student is introduced to medieval literature in England. Portions of Chaucer, Gower, Wycliffe, and Langland are read in Middle English. Other writings and their cultural setting are treated in lectures, discussions, and term papers.

## Eng. 433. Shaw, Galsworthy, and Wells

3 s.h.

These eminent writers of the first half of the Twentieth Century will be read and discussed to understand their attitudes toward society and to examine the contrasts in their ideas and styles.

#### Eng. 441. Modern Poetry: French Symbolists to T. S. Eliot

Representative Symbolist, Georgian, and Imagist poets are studied in depth in order to examine the theories and principles upon which Modern Poetry is based.

## Eng. 442. Contemporary Poetry: W. H. Auden to the Present

s.h.

The distinctive poetry movements that have occurred since the Imagists are examined through the study in depth of representative poets. Critical appreciation is developed through comparison of diverse styles, themes, and poetic theories. Recommended prerequisite: Modern Poetry 441.

#### Eng. 453. Theme, Form, and Idea in the Drama

2 s.h.

The analytical perspective needed in all evaluations of drama, new or old, is given. To this end, theme, form, and idea in dramatic history are investigated. Selected plays from Aeschylus to the present are arranged for the study of these components.

#### Eng. 454. The Film and Society

3 s.h.

The film is studied and evaluated as an art form, an educational device, a social force, and an entertainment medium. The history of motion pictures, film techniques, and the scenario as a literary type are examined. Numerous films are shown, analyzed, and discussed.

#### Eng. 461. Biography: Its Form and Function

3 s.h.

Selected biographical writings, including autobiography, diary, and memoirs, from medieval England to contemporary American Pulitzer Prize biographies, are examined. Study emphasizes both changing concepts of the form and also revelations of the nature, character, and varied destinies of human personality.

#### Eng. 462. Autobiography

3 s.h.

The world's major autobiographical writing as it appears in the memoirs, diaries, and journals of some of the greatest political and literary figures will be evaluated. Beginning with autobiographical expression in ancient times, the reading proceeds chronologically. A deeper insight into the life and times of these figures in terms of their significance for contemporary life is emphasized.

#### LIBRARY SCIENCE COURSES

#### Library Science 403. Reading Materials for Children and Youth: Selection and Evaluation

4 s.h.

This course consists of a study and evaluation of library materials provided by the modern school library to meet the needs of youth. Extensive critical reading of books for children and young adults is required. Principles of book selection are emphasized and experience in the use of selection tools is provided. The point of view relates the library collection to the total school program.

## Library Science 404. Organization and Administration of School Libraries

3 s.h.

Practical experience in setting up effective library routines is stressed. These routines include budgeting, locating sources for library materials, purchasing materials, book processing, preparing library reports and statistics, taking inventory, planning and adapting library rooms and equipment, and evaluating library collections and services.

## DEPARTMENT OF FINE ARTS

Graduate Advisor: DR. CHARLES H. MARTENS

The graduate program in Fine Arts leading to the Master of Arts degree is intended:

- a. to offer to Fine Arts teachers in the New Jersey public schools an opportunity to gain further professional preparation for the improvement of their teaching skills.
- b. to provide an opportunity for students to extend, intensify, and enrich their undergraduate program of general education in order that they may become better informed and more responsible citizens of a changing society.
- c. to assist students to acquire a more advanced and comprehensive grasp of the major problems, issues, and techniques of professional education.
- d. to provide an opportunity for students to extend their knowledge and experience in their field of specialization.
- e. to encourage the spirit of scientific inquiry and creative, original, and independent thought by providing training and experience in educational research.
- f. to provide experience designed to develop in students desirable personal and social qualities of democratic citizenship.
- g. to encourage the teacher to gain the requisite status for professional advancement.

## Admission Requirements and Screening Procedures:

- a. The requirements established for all graduate studies and for matriculation at the College will be followed in respect to this program.
- b. Matriculation requires completion of a minimum of 36 semester hours in Fine Arts, including both history and studio courses, or equivalent art studies at recognized institutions.
- c. A portfolio of representative art work will be required as evidence of the applicant's ability. Advice concerning this requirement may be obtained from the Department Graduate Advisor.
- d. The Department may require one or more specified probationary courses prior to matriculation.
- e. Failure to meet the standards on requirements b and c above will not automatically rule out an applicant for admission or completion of the program.
- f. The program for elementary classroom teachers lacking an undergraduate fine arts major has been discontinued.

Applicants are cautioned that this M. A. program does not automatically lead to a teacher-certification in art, nor does the program offer a major specialization in art history.

I. Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h.

# II. Specialization Courses Required: F.A. 590 Modern Philosophies of Art F.A. 591 Selected Problems in Art History F.A. 603 Seminar in Art Education (Required of all candidates except students who elect Graduate 600 Master's Thesis) 2 s.h.

#### Electives:

The following courses will be elected by students subject to approval of the Graduate Advisor:

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	1.	Art Educati	ion	
			Readings in Art Education 2	
		F.A. 502. F.A. 603.	Curriculum Construction in Art Education	
		2		5.11.
	2.		and Philosophy	
		F.A. 400. F.A. 411.	Philosophy of Art	
		F.A. 412.	Primitive Art	
		F.A. 413.	History of American Art	
		F.A. 453.	Modern Art	
		F.A. 620.	Field Course in Art	s.h.
	3.	Fine Arts		
			Home Design and Community Planning 2	
			445B, 445C, 445D. Life Drawing	
			452B. Multi-Media	
			460B, 460C, 460D. A Contemporary Art Form (Pho	otog-
		E 4 5114	raphy) 2 s.h.	
		F.A. 511A,	511B, 511C, 511D.       Painting       2 s.h.         521B, 521C, 521D.       Sculpture       2 s.h.	each
			525B. Metalwork and Jewelry	
		F.A. 531A,	531B, 531C, 531D. Ceramics	each
		F.A. 541A,	541B. Weaving       2 s.h.         543B. Decoration of Fabrics       2 s.h.	each
		F.A. 550.	Silk Screen Printing	s.h.
		F.A. 551.	Intaglio Printing	s.h.
			Woodcut Printing	
			Lithography	
		F.A. 557.	Graphic Design	
	4.	Individual S	Study and Thesis	
		Grad. 600.	Master's Thesis 4	s.h.
		F.A. 611, 6	512. Individual Study	each
[.	Fre	ee Electives	6-8	s.h.
			Minimum 32	s.h.

## **GRADUATE COURSES**

## Fine Arts 501. Readings in Art Education

III.

2 s.h.

This course is a study of the literature of the foundations of art education. Readings will be selected from philosophy, the social and behavioral sciences, and the history of art education. The implications of the developments in science and technology will be studied.

## Fine Arts 502. Curriculum Construction in Art Education

This course is planned for students with interest in curriculum construction or revision and includes both the elementary and secondary programs. A study of curricular materials in use in New Jersey and selected materials in use throughout the country will be made. Evaluation of these materials will be made in terms of principles of curriculum construction.

## Fine Arts 503. Foundations of Art

2 s.h.

This is a survey course designed for public school administrators, guidance personnel, and teachers of disciplines other than art. It includes a study of the philosophy of art, the historical purposes of art, forms of art and their valuation, and implementation of the objectives of art in education. Elective for non-art majors.

## Fine Arts 511A, 511B, 511C, 511D. Painting

2 s.h. each

Studio in painting is designed to further the creative impression and technical knowledge of the student in various painting media. Emphasis will be upon personal and professional development through studio work, trips, and the study of the work of contemporary artists.

## Fine Arts 521A, 521B, 521C, 521D. Sculpture

2 s.h. each

In these courses the student is expected to explore independently one or two materials and techniques and to begin to find his own directions as a sculptor.

## Fine Arts 525A, 525B. Metalwork and Jewelry

2 s.h. each

Experiences in this sequence involve the designing of jewelry and small sculpture in varied metals and employing the techniques of flat sheet metal and casting.

## Fine Arts 531A, 531B, 531C, 531D.

#### Ceramics: Pottery and Sculpture

2 s.h. each

This course is designed for continued experimentation with the potter's wheel, various handbuilding methods of forming and further experimentation with clay compositions, glazes and methods of firing.

Advanced students will be held responsible for developing a consummate craftsmanship and a personal idiom. Prerequisite: Undergraduate experience in ceramics, portfolio, or instructor's approval.

## Fine Arts 541A, 541B. Weaving

2 s.h. each

Primary emphasis in this experience is on designing with simple and four harness table and floor looms in a variety of techniques and materials.

#### Fine Arts 543A, 543B. Decoration of Fabrics

2 s.h. each

In this area major emphasis is on designing of the fabric through block printing, silk screen printing, stitchery, hooking, applique, and dyeing techniques.

#### Fine Arts 550. Silk Screen Printing

2 s.h.

This course affords an opportunity to study and practice the graphic art techniques of silk screen from the creation of the master design through the construction of necessary printing facilities and printing. Experiences will include the use of tusche, glue, stencil lacquer, and photographic techniques.

## Fine Arts 551. Intaglio Printing

2 s.h.

This course is designed to enable the graduate student to acquire additional competency and depth of experience in etching, dry point, aquatint, and soft ground. Stress is on critical evaluation of design integrated with printing techniques.

#### Fine Arts 552. Woodcut Printing

2 s.h.

This course explores the fine art of the woodcut, and its relation to painting in color, size, and richness. The cutting of various woods and veneers is fully demonstrated. Different approaches of printing and inventiveness in using other materials in relation to wood are fully explored. The course includes lectures on prints of the past and field trips to important print exhibitions,

## Fine Arts 553. Lithography

2 s.h.

This course is designed to provide opportunity for the student to acquire competency in the art of lithography. All steps from design and execution of master drawing to the finished print are covered. Studio experiences provide the student with first hand knowledge of tools, materials, and techniques of the lithographic process. Adaptation of the lithographic phase of print-making to classroom use is also studied.

#### Fine Arts 556. Lettering

2 s.h.

This course provides a study of styles and techniques of lettering applied in such forms as manuscripts, signs, posters, display, and advertising layout. A brief introduction to typography is offered in the course.

#### Fine Arts 557. Graphic Design

2 s.h.

This course is concerned with the techniques and principles of design of printed matter and displays. Design projects involve elements of layout, illustration, typography, printing process, and preparation of copy for the printer.

#### Fine Arts 590 (402) Modern Philosophies of Art

3 s.h.

The work of the major writers in art in the Nineteenth and Twentieth Centuries is examined. Exploration is made in the nature of the creative experience, the function of art in the life of the individual and of society, the nature of the creative process, the rise of new materials, and institutions and sentiments affecting current thinking in the field. Discussions are based on readings of philosophers, poets, social scientists, psychologists, and artists. For Fine Arts majors and others by Departmental permission.

#### Fine Arts 591 (492 A,B) Selected Problems in Art History

3 s.h.

This is a seminar course dealing with selected art problems of historic, social, and philosophic nature. Some of the following topics are chosen for a detailed examination: the human figure in the history of art; the rise of landscape painting; Impressionism in the East and West; historical views of art criticism; the self-portrait; Romanticism and Realism; art and society; the art market; the relation of the sciences; and the rise of "Isms." Methods of dealing with selected topics include lectures, readings, reports, and discussion.

#### Fine Arts 603. Seminar in Art

2 s.h.

This course is designed primarily to afford the graduate student an opportunity to make an extensive study in the field of art. Prerequisite: Educ. 503.

The seminar extends through Fall and Spring semesters. Within this period, each student will carry out either A or B:

- A. WRITTEN PROJECT. The student will enroll, with the approval of the graduate advisor, in this course F.A. 603, Graduate Seminar in Art. Approval should be secured in the spring semester or summer session preceding fall registration into F.A. 603.
- B. CREATIVE PROJECT. Pre-requisite: at least one course in the chosen studio area, during which course the student must secure: 1. approval of the instructor as to competence in the medium; 2. agreement by one particular faculty member to serve as personal advisor throughout the creative project; and 3. approval of the departmental graduate advisor. Upon such approval, the student will enroll for the subsequent fall semester in course F.A. 603.

#### Fine Arts 611, 612. Individual Study

2 s.h. each

Under this course designation, advanced students may extend their experience beyond the regular course offering in a chosen field or medium, to a maximum of 12 hours in the particular medium. Direction, conduct, and evaluation of the work are developed in consultation with the instructor. As a basis for admission and planning, each student will present a representative selection of his prior work in the chosen medium.

#### Fine Arts 620. Field Course in Art

2-6 s.h.

Travel courses to art sources in the United States and foreign countries will be accepted for graduate credit not to exceed 6 points. A general catalog description of these courses follows. Content and requirements will be set up as the courses evolve.

This course provides the opportunity to have a first-hand contact with the historic art forms of the places visited and to see contemporary artists and craftsmen in the process of creating art forms. Each student will select an area of study in which the places visited have rich art resources. As preparation for the course the student will outline his chosen study problem, read background material, and list sources he expects to utilize.

#### SENIOR-GRADUATE COURSES

#### Fine Arts 400. Philosophy of Art

2 s.h.

This course is designed to give the student a knowledge of the various theories of art and the nature of the art experience. Readings include the works of major philosophic writers, artists, and psychologists. Through discussion each student is encouraged to develop a personal philosophy of art education. For fine arts majors or by instructor's permission.

## Fine Arts 411. History of Oriental Art

2 s.h. each

Just as the art of the Italian Renaissance developed out of humanism and its mancentered philosophy, so the art of the East grew out of equally strong, although totally different (and even diametrically opposed) influences. This course examines the factors which shaped Oriental society and the rich art inventory that evolved in China, Korea, Japan, India, South East Asia, and the neighboring Islamic world. Slides, illustrations, and museum objects are studied not only as they mirror historic developments but primarily as objects of artistic excellence in themselves. An elective for Fine Arts majors and non art majors.

#### Fine Arts 412. Primitive Art

2 s.h.

This course surveys the art of those people we generally call "primitive"—African and Oceanic—and of the various people of North, Central, and South America before the arrival of Columbus. Far from being the crude expressions of illiterate savages, their art appeals to modern man for the sophisticated, immediate, and forceful impact it makes. The major styles and sub-styles of the regions listed above are identified, through slides, illustrations, and examples exhibited in museums and galleries, and the works are discussed from the standpoint of their aesthetic contributions. An elective for Fine Arts majors and non art majors.

#### Fine Arts 413. History of American Art

2 s.h.

An examination of art in the United States from the Colonial period to the present, with special consideration given to the question of the development of an American "style" in the light of its relationship to, and dependence upon, European art. The landscape, portrait and genre traditions in the painting of the United States are studied, as well as developments of the Twentieth Century. Folk, classical, and modern expressions in sculpture will be surveyed as well as architecture from colonial dwellings to works of this century. An elective for Fine Arts majors and non art majors.

## Fine Arts 425A and 425B. Metalwork General: I and II

2 s.h. each

These courses introduce fine arts students to the metals and techniques traditionally used in the shaping of useful articles and to the influence of both materials and construction on methods of design. The role of the designer craftsman in a technological society, the relationships of hand and machine arts, and the influence of the handicrafts on the development of taste are explored. Research includes trips, reading and discussions. Elective for fine arts majors.

#### Fine Arts 445A, 445B, 445C, 445D. Life Drawing

2 s.h. each

Fine arts majors study the structure and proportions of the human form with emphasis on expressiveness of drawing. Elective for fine arts majors.

## Fine Arts 451A, 451B. Painting: The Environment

2 s.h. eacl

This course offers experiences in an area of painting whose content depends essentially upon a personal vision of the outer world. The interpretation of landscape as a unique source of pictorial ideas will be of first importance and the student will be encouraged to acquire concurrently some understanding of landscape painting in art history. To this end study of styles achieved by master landscapists will be carried out with particular reference to their relevance in our time. A variety of painting media will be used according to individual desire. An elective for Fine Arts majors only.

## Fine Arts 452A, 452B. Multi-Media

2 s.h. each

This course will present an opportunity to bring together previous fine arts experience in painting, sculpture, and various aspects of theater arts.

The projects will be architectural and environmental in nature and will serve to introduce the student to both historical and contemporary ideas of "total-art." An elective for Fine Arts majors only.

#### Fine Arts 453. Modern Art

2 s.h

This course is designed to survey through the use of visual materials such as slides, art films, and reproductions, and through discussion, the major influences and trends in the development of painting, sculpture, and architecture of this century. An elective for Fine Arts majors only.

## F.A. 460A, 460B, 460C, 460D, Photography: A Contemporary Art Form 2 s.h.

The content is predominantly creative, using the technical materials as a medium of expression and experimentation. The work of leading contemporary artists using photography as an art medium is studied. Elective for fine arts majors.

#### Fine Arts 490. Art of the Nineteenth Century

2 s.h.

This course explores the major art movements of the Nineteenth Century in terms of the rapid changes of social, political, and artistic personalities. The rise of Classicism, Romanticism, and Realism; the salon at mid-century; the Impressionists and post-Impressionists are discussed as well. The work of this period is studied through illustrated lectures, museum trips, readings, and discussion. Elective for non-art majors only.

#### Fine Arts 491. Art of the Twentieth Century

2 s.h.

This is a course designed to survey through the use of visual materials such as slides, art films, and reproductions, and through discussion and studio participation, the major influences and trends in the development of painting, sculpture, and architecture of the Twentieth Century. Elective for non-art majors only.

#### Fine Arts 493. Masterpieces of World Art

2 s.h.

Designed for non-art majors, this introductory course studies key works of art representing prehistoric cultures, the ancient world, the East, the Renaissance, and the modern period, in reference to their historical and cultural settings and the personality of the artist. The course employs illustrated lectures, museum and gallery trips, readings, and discussion. Elective for non-art majors only.

## DEPARTMENT OF FOREIGN LANGUAGES

Graduate Advisors: Dr. Paul A. Gaeng, Spanish Mr. Louis M. Roederer, French

It is expected that all candidates for the Master of Arts Degree will take French 505 or Spanish 505 and at least one of the two listed foundation courses, unless similar courses were already taken at the undergraduate level.

A candidate for the Master of Arts Degree may elect to write a thesis in lieu of four of the thirty-two semester hours of credit necessary for the degree. Plans for the thesis should be approved by the Department Chairman no later than one year prior to the anticipated date of graduation, and the work must be completed no later than four months before such anticipated date. It will be the responsibility of the student to observe these time limits.

General standards for matriculation will be as set forth in the College Graduate Bulletin. Individuals who do not wish to work toward the Master's Degree may enroll in the department with the approval of the Department Chairman.

Study abroad programs, previously required for admission to the Graduate School for French and Spanish majors, are now part of the elective courses offered by the Department either during the summer or on a yearly basis. Outlines of these programs will be found at the end of the list of elective courses. Further details may be obtained from the Graduate Advisor for the Department of Foreign Languages.

All courses are given in the language of the literature studied, except Language 408, Language 603 and other courses as may be necessary.

#### REQUIREMENTS FOR THE M.A. DEGREE IN FRENCH

I. Basic Professional Education (see Master's Degree Program Patterns) 6-9 s.h.

II.	Specialization 11-	20	s.h.
	Required Course		
	French 505. History of the French Language	2	s.h.
	Foundation Courses (minimum 2 s.h.)		
	Language 408. Introduction to Language Laboratory	2	s.h.
	French 506. Advanced French Phonetics	2	s.h.

Elective Courses

These courses will be elected, with Departmental approval, and will be offered on a rotating schedule so as to enable students preparing for their Master's degree to take at least one course on each century within a year, summer session included. Students specializing in French may elect some courses from other Foreign Language offerings.

III. Free electives
6-8 s.h.
minimum: 32 s.h.

IV. Comprehensive Examination

## REQUIREMENTS FOR THE M.A. DEGREE IN SPANISH

I. Basic Professional Education (see Master's Degree Program Patterns) 6-9 s.h.

# II. Specialization 11-20 s.h. Required Course Spanish 505. History of the Spanish Language 2 s.h. Foundation Courses (minimum 2 s.h.) Language 408. Introduction to Language Laboratory 2 s.h. Spanish 506. Advanced Spanish Phonetics 2 s.h.

Elective Courses

These courses will be elected, with Departmental approval, and will be offered on a rotating basis so as to enable students preparing for their Master's Degree to take courses in both areas of Spanish and Spanish-American literature. Students specializing in Spanish may elect some courses from other Foreign Languages offerings.

III. Free Electives

6-8 s.h.

minimum: 32 s.h.

IV. Comprehensive Examination

#### **GRADUATE COURSES IN FRENCH**

NOTE: Previous course numbers are enclosed in parentheses. Students are not permitted to enroll in courses taken previously under other titles and/or course numbers.

## French 505. (515) History of the French Language

2 s.h.

The course is designed to acquaint the student on the graduate level with the developmental processes in language with special reference to French. It examines also the relationship between language change and cultural change. The French language is studied from its origins to the present time with units in Vulgar Latin, Old French, Middle French, Renaissance French, and Modern French. At each step, development of phonology, morphology, and vocabulary are studied along with social backgrounds.

#### French 506. Advanced French Phonetics

2 s.h.

This course is designed to acquaint students on the graduate level with the principles of phonetics and their practical application in acquiring and teaching a correct French pronunciation. Some previous knowledge of phonetics is desirable.

#### French 510. Supervised Individual Study

1 or 2 s.h.

This course is designed to provide students with an opportunity to work in depth on a subject of special interest, or to make up part of a course in which the student has failed or shown specific weaknesses.

#### French 511. (505) Medieval French Literature

2 s.h.

This course is designed as a survey of the origins and developments of the principal genres during the Middle Ages in France: chanson de geste, literature courtoise, fabliaux, chroniques, theater and poetry.

#### French 516. (506) French Literature of the Renaissance

2 S.II.

This course is designed to give the student a comprehensive view of the literature and ideas of Sixteenth Century France, including the study of the following authors: Montaigne, Rabelais, Clément Marot, Ronsard.

## French 526. Corneille and Racine

2 s.h.

This course is designed to acquaint students on a graduate level with the evolution of the classical theater in the Seventeenth Century. The dramatic art, psychology, and symbolism of Corneille and Racine will be analyzed through extensive reading and intensive discussion of their major plays. The student will be asked to evaluate the impact of these plays in written and oral reports.

#### French 527. Pascal and Descartes

2 s.h.

This course is designed to acquaint the student with the writings, ideas, and scientific achievements of Pascal and Descartes. Special emphasis will be put on Pascal's Pensées and Provincial Letters.

#### French 533. The Age of Enlightenment

2 s.h.

This course is designed to acquaint the student with the philosophical, educational, and social concepts of the century through intensive study of Voltaire, Montesquieu, Rousseau, and Diderot.

#### French 534. Le Sage, Marivaux, Beaumarchais

2 s.h.

This course will require extensive readings and analysis of the most important plays of the time, including Turcaret, Le Jeu de l'Amour et du Hasard, Le Mariage de Figaro and similar works.

#### French 538. The French Novel of the Nineteenth Century

2 s.h.

This course aims at offering the graduate student an insight into the major works and literary criticism of masters of French fiction.

#### French 539. Survey of Nineteenth Century French Poetry

2 s.l

This course is designed to offer the graduate student a survey of the development of French poetry from Romanticism through the Parnassian School to Symbolism, important poems of Lamartine, Hugo, Vigny, Musset, Laconte de Lisle, Heredia, Baudelaire, Verlaine, Rimbaud and Mallarmé are read and discussed.

#### French 542. (407) The Contemporary Theater

2 s.h.

The purpose of this course is to acquaint students on the graduate level with the history and development of the French theater since 1890. Major currents and trends in contemporary drama will be analyzed. Authors studied include Paul Claudel, Henri de Montherlant, Jean Giraudoux, Jean-Paul Sartre, Albert Camus and other dramatists representative of each major trend of the modern French theater.

#### French 543. The Contemporary Poets

2 s.h.

This course considers the development of French poetry from Symbolism to Surrealism and will include works from such poets as Apollinaire, Saint-John Perse, Supervielle, Eluart and Aragon. The aim of this course is to convey to the students a deeper appreciation of French poetry through a literary and historical approach and the study of the fundamentals: versification, the technical side of poetry and imagery, the language of poetry.

## French 544. (406) The Contemporary Novel

2 s.h.

This course is designed to acquaint students on the graduate level with the history and development of the French novel from Proust to the present day. Major currents and trends are analyzed; works of modern novelists, including Proust, Gide, Malraux, Sartre, and Camus are read and discussed.

#### SENIOR-GRADUATE COURSES IN FRENCH

#### French 408. Contemporary French Drama

2 s.h.

The aim of this course is to study the evolution of French drama from the beginning of the Twentieth Century to the period immediately following World War II. More recent works will not be included in this study.

#### French 410. Advanced Composition

2 s.h.

This course is designed to improve the student's mastery of the language through written and oral exercises accompanied by a review of advanced grammar.

## French 411. (502) Study Abroad

6-10 s.h.

This course is designed to give teachers and students an opportunity to gain first-hand knowledge of the historical, social, economic, and cultural life of France and Europe. This aim will be achieved through visits to various representative sites, tours, and lectures.

## French 421. French Language Seminar

2 s.h.

This course is designed to acquaint students on the graduate level with the effective use of the laboratory in language teaching. Problems relating to materials, methods, new techniques, facilities, and scheduling are discussed.

#### GRADUATE COURSES IN SPANISH

#### Spanish 505. History of the Spanish Language

2 s.h.

A survey of the development of the Spanish language from its origin to the present day in Spain and Spanish America. The course traces the phonological, structural and lexical evolution of Spanish from its Latin ancestor, by following the process of its transformation, as well as the various stages through which the language has passed from the time of its first documentary appearance.

#### Spanish 506. Advanced Spanish Phonetics

2 s.h.

The course is especially designed for Spanish teachers who wish to acquire a correct pronunciation and enunciation according to the best patterns of speech of the Spanish language as it is spoken by the educated vernacular speakers of Spain and Spanish America.

#### Spanish 510. Supervised Individual Study

1 or 2 s.h.

This course is designed to provide students with an opportunity to work in depth on a subject of special interest, or to cover part of a course in which the student has failed or shown a special weakness.

## Spanish Area

## Spanish 516. Survey of Medieval Spanish Literature

2 s.h.

A review of outstanding works and themes from Latin, Arabic, and Hebrew roots—expressing the main features of Spanish literature, culture, and thought from the Eleventh Century "Jarchas" and "Cantarcillos de amigo" through the *Poema del Cid* and culminating in *La Celestina* and the advent of the Golden Age.

#### Spanish 521. The Novel of the Golden Age

2 s.h.

2 s.h.

A survey of its creation and development from earlier forms through a reading of representative works of the picaresque genre—from Lazarillo de Tormes to El Buscón—as well as the Novelas Ejemplares of Cervantes, emphasizing their ethical and artistic values and influence in the main stream of European literature.

## Spanish 522. The Theater and Poetry of the Golden Age

Poetic currents of the "Siglo de Oro" beginning with the Renaissance period, from the popular lyrical poetry and the Romancero through the adoption of the Italian forms and metres and the mystic poets to the Baroque period. In the drama, representative plays of Lope de Vega, Tirso de Molina, Calderón de la Barca, and Ruiz de Alarcón are read and analyzed against the historical background of the Sixteenth and Seventeenth Centuries.

#### Spanish 524. Seminar in Cervantes

2 s.h.

The course is designed to study Cervantes as a figure of synthesis in the art of the novel in Spain. El Quijote, the Novelas Ejemplares and Persiles y Segismunda will be analyzed. Oral and written reports will be prepared by the student.

#### Spanish 526. Spain in the Nineteenth Century

2 s.h.

This course will aim at providing an understanding of the historical, cultural and political developments of Nineteenth Century Spain. Readings and discussions of the most representative authors of the romantic, neo-classicist, and realistic trends.

#### Spanish 532. (430A) The Short Story in Spain

2 s.h

This course covers the study of the origin and development of the short story in Spain from the Middle Ages to the present time. Different types of short stories are studied in order to explain historically and sociologically the appearance of themes written in Spanish through the centuries. The aim of the course is to give the student additional understanding of the Spanish people, their culture and history, as expressed by the short story from the Thirteenth Century to the present.

## Spanish-American Area

#### Spanish 540. Sarmiento and His Times

2 s.h.

The purpose of this course is the study of the culture and civilization of the Rio de la Plata region and Chile from the period of Independence to the beginning of "Modernismo" through the most important figure of this period. Relations with the United States will be discussed.

## Spanish 541. (506) Spanish-American Novel

2 s.h.

The purpose of this course is to acquaint the student, through extensive reading and intensive discussion, with representative Spanish-American novels from the Sixteenth Century through the Twentieth Century. These works include narratives depicting life in early colonial times; the novel of adventure; the picaresque tale; the romantic novel; the psychological novel; the novel of the land; the sociological novel; the artistic "modernista" novel; the political novel; the novel of the Mexican revolution; the social, the neorealistic, the impressionistic, the philosophical and the existentialist trends in the novel.

## Spanish 546. Seminar in Modernismo

2 s.h.

A critical re-evaluation of the "Modernnista" phase of Spanish-American poetry: 1882-1917. Special emphasis will be given to individual techniques and characteristic use of specific images, the reliance on Synesthesia, and the attempt to incorporate pictorial elements into poetry which welded these individuals into a genuine poetic movement. Each participant is expected to present a piece of original research at a designated time during the course-term.

#### Spanish 548. Spanish-American Essay

2 s.h.

A careful reading of selected Spanish-American authors representing a cross section of all Spanish-speaking social classes and tendencies in order to evaluate their reactions through their written expressions. A comparison of the main essayists with their contemporaries in Spain and in the United States will show the tenor of political thought, inter-influences between the United States and Spanish-America, and the most important viewpoints of Spanish-American intellectuals.

## Spanish 549. (430B) The Short Story in Spanish-America

2 s.h.

This course will cover the development of the Spanish-American short story from its origins in the Colonial Times. Representative authors will be included to show the evolution of the genre up to the present time.

#### Spanish 551. (425) Contemporary Spanish-American Poetry

2 s.h.

This course considers the development of Spanish-American poetry from the anti-modernist reaction, and the four major feminine poets, as antecedent for the appreciation and evaluation of Neruda, Pellicer, Marechal, Borges, Gorostiza, Carrera Andrade, Florit, Villaurrutia and Octavio Paz. Readings from recently published books and poetry magazines of wide circulation in Spanish-America are included.

## SENIOR-GRADUATE COURSES IN SPANISH

#### Spanish 403. Projects in Spanish and Spanish-American Folklore

3 s.h.

The purpose of this course is to acquaint the student with the different folklore expressions of the Spanish Peninsula, as well as of the Spanish-American countries, including its music, dancing, and traditions and their application to the classroom. To be offered as a required course to majors and also as an elective to other students and teachers from the outside who satisfy the requirements of the department.

#### Spanish 404. Survey of Spanish Poetry

2 s.h.

This course is designed to give an understanding and appreciation of movements in Spanish poetry from the Middle Ages to the present with emphasis on the poets of the Twentieth Century.

#### Spanish 405. Great Currents of Contemporary Spanish Prose

2 s.h.

This course traces the literary trends in the prose of recent years. Particular attention is devoted to the "1898 generation."

## Spanish 410. Advanced Composition

2 s.h.

This course is designed to improve the student's mastery of the language through written and oral exercises accompanied by a review of advanced grammar.

## Spanish 411. (502) Study Abroad

6-10 s.h.

This course is designed to give teachers and students an opportunity to gain first-hand knowledge of the historical, social, economic, and cultural life of Spain and Europe. This aim will be achieved through visits to various representative sites, tours, and lectures.

## GRADUATE COURSES IN LANGUAGE

## Language 603. Foreign Language Research Seminar

2 s.h.

This seminar is designed primarily to provide an opportunity for graduate students in foreign languages to investigate and apply the techniques of research in the foreign language field. Prerequisite: Educ. 503 and matriculation for M.A. degree in the Foreign Language Department.

#### SENIOR-GRADUATE COURSES IN LANGUAGE

#### Language 406. (Lat. 406) Field Studies in Roman Civilization

6 s.h

The course is designed to acquaint students and teachers of Latin, history and languages with the Roman Conquest of Europe, specifically in Britain, France, Belgium, Switzerland, and Germany by studying and visiting Roman ruins and monuments in these countries, thus providing historical and archaeological background for the enrichment of their classes. Military invasions followed by colonization and the planting of Roman culture and civilization are an object of investigation, and remains "in situ" and in museums are viewed. Art and archaeology are reinforced by readings related to paralleling the site from the Latin authors: Caesar and Tacitus. Readings and a term paper due three months after the end of the tour are under the supervision of the instructor. Lectures on the tours of the sites are given by historians, archaeologists, and military personnel, authorities on the area, secured from universities, archaeological societies, museums and cultural commissions.

#### Language 408. Introduction to Language Laboratory

2 s.h.

This course is designed primarily to acquaint language teachers with techniques of language-laboratory utilization and with the preparation of materials for use in the laboratory. Attention is given to equipment—its selection, operation, utilization, and basic maintenance. The course is open to all teachers of foreign languages and to audio-visual specialists, and is taught in English.

#### Language 410A. Roman Civilization to Imperial Times

2 s.h.

Rome's contribution to Western Civilization is studied through her architecture, art literature, science, and sculpture.

### Language 410B. Roman Civilization During the Empire

2 s.h.

This course is designed to acquaint students and teachers with the Roman Conquest of Europe, with emphasis placed upon the planting of Roman culture and civilization. The course will provide a background of history and archaelogy for all Latin programs. It is particularly recommended to those who will take Language 406.

#### Language 411. Greek Civilization

2 s.h.

Greece's contribution to Western Civilization is studied through her architecture, art, literature, and sculpture.

#### Language 412. General Linguistics

2 s.h.

This course introduces the study of linguistics in general and of the Indo-European group of languages in particular. It focuses upon the origin, history, and development of languages. Through lectures and readings the student is acquainted with the latest research findings in both descriptive and historical linguistics.

## Language 415. Classical Mythology

2 s.h.

This course is designed to give an understanding of the classical myths which are repeated again and again in the literature of the Western World. The origins of the myths are studied through readings and art, and an interpretation of their meaning is discussed.

#### Language 416. (Lat. 416) Seminar in Archaeology

2 s.h.

This course is an introduction to the science of evaluating a culture through observation and analysis of sites and monuments. Attention to problems of dating, types of materials, function of buildings and decorations. Illustrated lectures, readings and discussions in addition to museum field trips will highlight the course. This course is especially recommended for teachers of Latin, Social Science, English, Science, Mathematics, Industrial Education and Technology and Fine Arts.

# DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION

Graduate Advisor: DR. HAZEL M. WACKER

The graduate program in the Panzer School of Physical Education and Health is designed to assist the students in gaining depth, knowledge and understanding in their field of specialization. It provides the students a variety of opportunities to do research, examine studies of the latest developments, experiment with new methods and techniques and to examine current as well as historical documents. This program has been developed to enrich the quality of health and physical education programs in the schools of New Jersey.

A major or minor in health or physical education from an accredited college or university constitutes a minimum requirement for admission. Other admissions requirements are discussed elsewhere in the *Graduate Bulletin*.

A candidate for the Master of Arts Degree in Health or Physical Education should consult the Graduate Advisor of the Panzer School of Health and Physical Education before matriculation. The student with a minor preparation in health or physical education will be requested to undertake designated prerequisites as a part of his program. The student with a major in the above fields may be requested to undertake additional work where deficiencies are apparent. The prerequisite requirements will be in addition to the minimum 32 semester-hour work program.

# REQUIREMENTS FOR THE MASTER'S DEGREE IN HEALTH OR PHYSICAL EDUCATION

I. Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h.

II. Specialization 11-20 s.h.

Students may pursue a concentration in either Physical Education or Health Education. Each sequence will have certain required courses. Electives may be selected from either area within the limits outlined under Elective Courses below up to a maximum of 20 semester hours of required and elective courses under specialization.

. R	equired Cour	rses—Physical Education Sequence 1	2	s.h.
1.	Education	ducation 603. Research Seminar in Physical and Health		
2.	P.E. 575.	Foundations and Interpretation of Physical Education	2	s.h.
3.	P.E. 576. P.E. 577.	Curriculum Development in Physical Education; or Administration and Supervision of Physical Education	2	s.h.
4.	P.E. 578.	Physical Education for Exceptional Children	2	s.h.
5.	P.E. 579.	Advanced Tests and Measurements in Physical Education		
6.	H.E. 526. H.E. 529.	Curriculum Development in Health Education; or Seminar in Basic Issues in Health	2	s.h.

В.	Re	quired	Cour	ses—Health Education Sequence	12	s.h.		
	1.	Physical Education 603. Research Seminar in Physical     Education and Health						
		Grad.	<b>6</b> 00.	)				
	2.	H.E.	525.	History and Foundations of Health	2	s.h.		
	3.	H.E.	526.	Curriculum Development in Health Education	2	s.h.		
	4.			School Health Services; or Healthful School Living	2	s.h.		
	5.	H.E.	528.	The Evaluation of Health	2	s.h.		
	6.	H.E.	529.	Seminar in Basic Issues in Health	2	s.h.		
C.	Ele	ctives		0	-8	s.h.		

The selection of electives will be determined through advisement and will be based on the needs and interests of each individual.

#### III. Free Electives

6-8 s.h.

Minimum: 32 s.h.

## IV. Comprehensive Examination

A comprehensive written examination is required of all candidates for the Master of Arts degree with the exception of those students who elect Graduate 600, Master's Thesis, in which the student earns four semester-hours credit.

## **GRADUATE COURSES**

## **Health Education**

## H.E. 500. Health Aspects of Family Living

2 s.h.

This course deals with problems of growth and development, reproduction, heredity, and social and emotional aspects of sexual development. The role of the family in today's culture and problems of family relations are examined. Prerequisite: A basic course in Health Education,

#### H.E. 501. School Safety

2 s.h.

This course will deal with all aspects of safety relating to the well being of school personnel. Incidence of accidents and their cause, safety hazards, disaster control, and development of a school safety program will be considered.

## H.E. 508. Advanced Driver Safety

3 s.h.

This course continues the development of new and broader competencies in traffic safety, and the teaching of Driver Education, evaluation, and research. Prerequisite: Students must be certified Driver Education Teachers in the State of New Jersey and have had at least two years of experience as a Driver Education Teacher.

#### H.E. 525. History and Foundations of Health

2 s.h.

The history of the health movement is traced from 1000 B.C. to the present with special emphasis on certain periods that serve as landmarks in man's progress in health promotion. The unique role of the school as one agency in health promotion is considered in depth. The foundations for programs of health are studied in relation to scientific advancements and prevailing philosophies.

## H.E. 526. Curriculum Development in Health Education

2 s.h.

The purpose of this course is to provide the student with opportunities to improve his skills and techniques in curriculum construction. The framework of the curriculum and criteria for selection of curricular experiences will be undertaken. A review and analysis of appropriate teaching methods, materials, and evaluation procedures will also be considered. Prerequisite: A methods course in Health Education.

## H.E. 527. Healthful School Living

2 s.h.

School environment, organization of the school day, and the inter-personal relationships favorable to emotional, social and physical health are examined in this course. Standards for building construction and policies are studied as they relate to the school environment. The policies and procedures of schools that contribute to the emotional health of students are considered. Prerequisite: A basic course in Health Education.

#### H.E. 528. The Evaluation of Health

2 s.h.

The procedures useful in determining the effectiveness of the school health program and its several phases are considered. The purposes of evaluation, devices available, and administrative problems are discussed. The development and interpretation of evaluation devices are an important part of the course. Prerequisite: A methods course in Health Education.

#### H.E. 529. Seminar in Basic Issues in Health

s.h.

This course is designed to survey current trends in the organization, administration, and teaching methods of health education. The content of the course will be based on the developed objectives evolved by the students and teacher in light of their experiences. Prerequisite: A methods course in Health Education.

## **Physical Education**

#### P.E. 550. Survey of the Literature and Trends in Physical Education 2 s.h.

Students will be required to survey comprehensively books, periodicals, and other teaching materials in the field of physical education. They will also identify the outstanding authors and be familiar with their basic philosophies.

#### P.E. 551. Philosophy of Recreation in School and Community

2 s.h.

Presents a survey of the development of recreational philosophies and a study and evaluation of the modern philosophy in America. The organization of recreation in school and community, the importance of leadership, social and cultural implications, economic, governmental, and leisure time influences, and a study of current practices will be undertaken.

## P.E. 552. Seminar in Current Problems in Men's Athletics

2 s.h.

The organization and administration of intramural and inter-scholastic athletic programs will be considered in this course. Current practices related to crowd control, scheduling, promotion of the program, personnel, and other persistent problems identified by the students will be discussed. Trends in such areas as sports medicine, coaching, and officiating will also be considered.

# P.E. 553. The Development and Conduct of Extra Curricular Physical Education for Girls 2 s.h.

Cultural, educational, economic and physical aspects in the selection of appropriate activities will be considered. Objectives in relation to desired outcomes will be established on the basis of group needs. Types of program organization and planning will be discussed, motivation, publicity and awards will be considered, programs in operation will be examined, and literature and research projects will be reviewed.

#### P.E. 554. Orientation in Sports Medicine

2 s.h.

New techniques, materials, modalities, and problems related to the prevention and care of athletic injuries will be covered. Appropriate current developments in the field of sports medicine will be discussed and studied along with new concepts and activities for conditioning for both the athlete and non-athlete. Prerequisite: Courses in the Prevention and Care of Athletic Injuries, Kinesiology, and Physiology of Exercise.

## P.E. 555. Scientific Analysis of Sport and Physical Education Skills 2 s.h

This course is concerned with the principles of efficient movement as determined through research in allied fields. A study of mechanical and physiological principles will be undertaken to emphasize their importance in accelerating and improving motor learning as well as efficient body movement. Laboratory exercises, projects, and demonstrations will be the primary methods involved.

## P.E. 570 Current Trends in Elementary Physical Education

2 s.h.

A prerequisite for the course is an undergraduate course in physical education for elementary school children, or permission of the instructor. The purpose of the course is to

review and build upon the undergraduate program and experiment with new methods and techniques with special emphasis on the inter-disciplinary approach to teaching, movement, education, gymnastics with hand apparatus, rhythms, and physical education as related to visual perception and space relationships. Time should also be given to other areas in which the class members felt they needed more help.

## P.E. 575. Foundations and Interpretation of Physical Education 2 s.h.

A brief review of the history of physical education with emphasis on the development of physical education in the United States. Exploration of modern theories and philosophies of physical education in the United States and in foreign countries. A study of the scientific basis and foundations of physical activity and their relation to performance and fitness. Prerequisite: A course covering the history and principles of Physical Education.

## P.E. 576. (450) Curriculum Development in Physical Education 2 s.h.

A study of the selection of appropriate physical education activities for elementary and high school programs based on principles of growth and development and psychological and sociological needs. Current trends and practices will be investigated and evaluated. Opportunities will be made available for working in the student's particular area of interest, and to identify the relationship of physical education programs at all levels, and of physical education to other areas of instruction in the school curriculum. Prerequisite: Methods course in elementary and secondary physical education.

## P.E. 577. Administration and Supervision in Physical Education 2 s.h.

This course will concern itself with the role of the teacher and administrator in supervision in physical education. Techniques of interviews, visitation, conference and others will be studied in reference to their use with student teachers, beginning teachers, and experienced teachers. Supervision of both physical education and classroom teachers will be considered. Prerequisite: Three years of teaching experience.

#### P.E. 578. Physical Education for Exceptional Children

2 s.h.

An advanced course in the adaptation of physical education for the exceptional child. The aims, objectives, principles and underlying philosophy will be reviewed. The administration, organization and development of such programs in the schools will be discussed at length. Current trends will also be evaluated. Prerequisite: An undergraduate course in adapted or corrective physical education.

#### P.E. 579. Advanced Tests and Measurements in Physical Education 2 s.h.

A survey will be made of the development of new tests and techniques for determining levels of skill, status in growth and development, and for the various qualities which contribute to total physical fitness. Advanced techniques for processing data also will be considered. Prerequisite: A course in educational statistics.

## P.E. 603. Research Seminar in Physical Education and Health 2 s.h.

The purpose of this course is to examine the principles upon which research is based in physical education and health and to familiarize students with important studies, programs, personnel and techniques employed in research in this area. Each student will be required to complete a research project which must be presented to the physical education faculty for approval. Prerequisite: Educ. 503.

#### SENIOR-GRADUATE COURSES

#### **Health Education**

#### H.E. 408. Driver Education

3 s.h.

A basic course for the certification of Driver Education teachers. The course consists of a minimum of 40 hours of class recitation and/or discussion and 20 hours of practical experience. Prerequisite: Driver's license and three years of satisfactory driving experience.

NOTE: Students must be recommended by their high school principal and have an interview with the instructor before registration. This course should not be selected as a health education elective.

## H.E. 411. School Health Services

2 s.h.

The student is familiarized with the health services in the school. The part the teacher plays in coordinating activities with the medical staff is emphasized. Prerequisite: A basic course in Health Education.

## H.E. 412. Alcohol Education Workshop

2 s.h.

This is a workshop course offered with the cooperation of the State Department of Health and aimed at preparing teachers and other school personnel for more understanding service in this special area of education. The workshop covers the physiological, sociological, and psychological problems involved in the use of beverage alcohol and on the materials, sources, and techniques found to be most useful in alcohol-education programs.

## H.E. 413. Drug Abuse Workshop

2 s.h.

A workshop in drug abuse planned for the upper class undergraduate, graduate student and in-service teacher. The workshop is concerned with the physiological, sociological and psychological problems associated with drug abuse. Outstanding resource personnel will be utilized as well as current literature, audio-visual aids, and other materials. The inclusion of this vital topic in the school curriculum will be considered.

#### H.E. 415. Community Health

2 s.h.

A study of the health needs of a community in relation to water supply, air purification, sewage and garbage disposal, food standards, housing, disease and pest control, and other related areas. Health problems are considered in the light of public health services and attention given to protective as well as corrective measures. The course is conducted through field trips, surveys, lectures, and the use of audio-visual aids. (Formerly Community Hygiene). Prerequisite: A basic course in Health Education.

## **Physical Education**

#### P.E. 414. Nature and Function of Play

The psychological and sociological implications of play are studied and related to the growth and development of children and young people. The effect of play on society through the ages, as well as the attitudes of society toward play, are studied to evaluate play in relation to juvenile delinquency, worthy use of leisure time, and other social and psychological problems. Prerequisite: Psyc. 201 or equivalent.

## P.E. 415. Movement Techniques and Rhythmic Accompaniment

2 s.h.

This course is designed to develop skill and understanding of body movement techniques and the rhythmic accompaniment of such techniques. Lectures, reading assignments, demonstrations, and participation will be utilized to relate anatomical structure and function to these movement techniques and to develop teaching skill.

#### P.E. 417 Dalcroze Eurhythmics

2 s.h.

The course deals with the philosophy and methods of Jacques Dalcroze, noted Swiss musician and music educator. The aim is to develop musicality and bodily coordination through the use of music and natural body movement. It presents a creative approach to teaching in music and physical education. Prerequisite: The ability to read and write music. Some ability in playing an instrument is desirable but not compulsory.

#### P.E. 420. Dance as an Art Form

2 s.h.

Experimentation in the use of time, space, and energy as applied to the dance medium. An exploration of modern dance as an art form with opportunity provided for individual and group choreography. Prerequisite: A course in Modern Dance.

## DEPARTMENT OF HOME ECONOMICS

Graduate Advisor: DR. KATHARINE B. HALL

Graduate study in the Department of Home Economics provides opportunity for acquiring greater breadth and depth in one of the areas of specialization in this field.

The Graduate program, leading to a Master of Arts degree, offers emphasis in one of three areas: home economics education, family relations, and home management and family economics. Course work in the Home Economics Department as well as related courses in other departments in the College, experience in research methods and techniques and a critical examination of the literature comprise the program.

## REQUIREMENTS FOR THE M.A. DEGREE IN HOME ECONOMICS

## Admission to Program

Matriculation normally will require a Bachelor's degree in Home Economics from an accredited College or University.

I.	Bas	ic Prof	essio	nal Ed	lucation	(see	Master's	Degree	Program	Pa	attern)	6-9	s.h.
II.	Spe	cializat	ion								1	1-20	s.h.
	A.	Core c	ours	es requ	ired of	all ca	ndidates					7	s.h.
		Home	Ec.	510.	Interdis Contem	ciplin porar	ary Stud	y of the	e Family	2	s.h.		
	B.	Empha	ısis i	n Subj	ect Matte	er					4	4-10	s.h.
		At leas	st on	e half	must be:	500 n	following umbered	courses.					
							Family ment of F		ion	2	s.h.		
		Home	LC.	550.		_			4	2	s.h.		
	C.	Free E										0-4	s.h.
		Home											
		Home											
		Home							or				
		Home Home			Tanorin	g	mily Livir			2	s.n.		
		Home	Ec.	420.						2	e h		
		Home	Ec.	432.					ciety				
		Home					gement in			~	U-141		
										2	s.h.		
		Home	Ec.	410.	Experin	iental	Foods			3	s.h.		

Courses in other departments related to Home Economics, subject to approval by graduate advisor, may be selected.

#### III. Free Electives

## IV. Comprehensive Examination

A comprehensive written-oral examination is required of all candidates for the Master's degree with the exception of those students who elect Graduate 600, Master's Thesis, in which the student earns four semester hours credit.

Minimum 32 s.h.

## **GRADUATE COURSES**

## Home Economics 510. Interdisciplinary Study of the Family 2 s.h.

To familiarize students with contributions which various academic disciplines (history, anthropology, biology, economics, as well as psychology and sociology) make towards a more comprehensive understanding of family life.

## Home Economics 511. Contemporary Issues in Home Economics 2 s.h.

A seminar dealing with timely issues in home economics with special emphasis on changes in society which affect the family. Attention is centered on problems of continuing concern.

## Home Economics 520. Dynamics of Family Interaction 2 s.h.

A critical review of concepts and theories, both psychological and sociological, which are currently used in understanding patterns and problems of family relationships.

## Home Economics 530. Management of Family Resources 2 s.h.

A study of the family as a decision-making unit directing its resources for more effective living. Philosophical, psychological, sociological and economic trends which have a direct influence on the family's ability to maximize its resource potential and utilization are included.

## Home Economics 531. Housing and the Family

A study of the principles of family housing; analysis of location, structure, design, furnishings, and equipment as a setting for the physical and emotional development of the individual and the family.

#### Home Economics 540. Child in the Family

2 S.H.

2 s.h.

An intensive study of the theories and research related to child rearing technique including a critical analysis of factors influencing parental practices and their effects on the child.

#### Home Economics 550. New Findings in Nutrition

2 s.h.

Recent developments in nutrition and a critical review of fundamentals. Prerequisite: Nutrition 306 or equivalent,

#### Home Economics 560. Clothing and Human Behavior

2 s.h.

An intensive study related to analysis of factors affecting appearance and satisfaction in clothing. The economic, sociological, and psychological aspects of clothing are studied in relation to the individual.

#### Home Economics 603. Advanced Studies in Home Economics 3 s.h.

Library or experimental research on specific problems of limited scope. Work may be taken in the following areas: (a) child and family (b) family and consumption economics (c) family housing (d) foods (e) nutrition (f) textiles and clothing. Prerequisite: Educ. 503.

#### SENIOR-GRADUATE COURSES

## Home Ec. 403A. Problems in Management

Cr: 2 s.hrs.

Studies of personal and family activity, organization, resources, and methods of problemsolving are made. Major consideration is given to managerial practices and variations among socio-economic groups, within different family units, and relative to families' goals in order to learn the application of effective management competencies.

## Home Ec. 406. Tailoring

Cr: 2 s.hrs.

Fundamental processes and procedures for constructing tailored garments and the differences between dressmaking and tailoring techniques are emphasized. A comparison is made between factory-made garments and custom tailoring.

#### Home Ec. 407. Consumer Economics

Cr: 3 s.hrs.

A study of how the family uses resources to acquire meaningful living. Content includes the motivations which influence American families' consumption patterns, credit use, financial security and protection, savings and investments, marketing systems and pricing variations, and approaches to sound financial management. Open to all students.

#### Home Ec. 410. Experimental Foods

Cr: 3 s.hrs.

A comparative approach to methods of food preparation with emphasis on new techniques. Each student does experimental laboratory work on selected phases of food preparation.

#### Home Ec. 415. Adult Education in Home Economics

Cr: 2 s.hrs.

Designed for home economists interested in teaching adults in school, community and extension programs. Emphasis is placed on understanding the adult learner and developing appropriate programs and teaching techniques. Prerequisites Home Ec. 401 A & B or equivalents.

## Home Ec. 416. Occupational Education in Home Economics Cr: 2 s.hrs.

Designed to give field experiences in work-study programs in occupational education. Emphasis is placed on learning how federal, state, and local occupational programs are administered and organized. Observations in Adult Education Programs is included.

#### Home Ec. 420. Teaching Family Living in the Public Schools Cr: 2 s.hrs.

Study and selection of subject matter and techniques for teaching family living in elementary and secondary schools.

## Home Ec. 421. New Developments in Clothing and Textiles Cr: 2 s.hrs.

Social, functional and technological developments will be examined in relation to implications for creative teaching, clothing and textiles at the elementary and secondary school levels.

#### Home Ec. 423. Supervision of Home Economics

2 s.h.

This course is designed for those concerned with supervision of teacher education programs in home economics. Objectives, curricula, recent trends, classroom management, evaluation of teaching, and professional literature in home economics are studied.

#### Home Ec. 424. Workshop in Home Economics

Cr: 2 s.hrs.

This course provides an opportunity to study current selected problems in the field of home economics.

#### Home Ec. 426. Home Management in Secondary School Curriculum

Cr: 2 s.hrs.

Special emphasis is placed on identifying managerial competencies and how these can be integrated into the home economics curriculum.

#### Home Ec. 427. The Disadvantaged Family

Cr: 3 s.hrs.

This course is a study of families with various kinds of disadvantages: social, economic, educational, physical and cultural. Of primary importance, however, are families from lower socio-economic and minority groups. Cause and effect factors, community agencies and curriculum development are some of the areas of study leading to understanding children from these backgrounds and orienting subject matter to their needs. Provision for individual, personal experiences will be part of the study. Open to all students.

#### Home Ec. 429. Family Sociology

Cr: 3 s.hrs.

Studies of family patterns around the world, through history, and among different socioeconomic groups are compared and analyzed. An underlying theme is the influence of rapid social change on the stability of the family and of the family-based values. Open to all students.

## Home Ec. 432. Women in Contemporary Society

Cr: 2 s.hrs.

A study of the roles played and dilemmas encountered by the modern American woman. Analysis of trends, developments and accomplishments of women, educational needs, social and economic contributions to the family and culture, and the resolution of professional, personal and family needs, interests and responsibilities. Open to all students.

## Home Ec. 436. Flat Pattern Design

Cr: 2 s.hrs.

Principles of flat pattern designing as they relate to the use of fabric on a three-dimensional form. Application of the principles of flat pattern designing to the development of design ideas for apparel and to the alteration of clothing. A master pattern is used in executing design ideas.

# DEPARTMENT OF INDUSTRIAL EDUCATION AND TECHNOLOGY

Graduate Advisor: DR. CARL E. FRANKSON

Graduate work in the Department of Industrial Education and Technology is designed to improve the professional training of industrial arts teachers: (1) to become more proficient in teaching through study of recent trends and new developments in the field, (2) to improve organization of the industrial arts laboratory, (3) to provide a basis for work in administration and supervision. Advanced work in industrial arts and related fields which broaden professional experiences and accent industrial concepts is emphasized.

Individuals who have an undergraduate major in this area, but who do not wish to work toward a degree, may enroll in graduate courses in the department with the consent of the advisor.

## REQUIREMENTS FOR THE M.A. DEGREE IN INDUSTRIAL ARTS

I.	Basic	Professional I	Education (	see Mast	er's Degree	Program	Pattern)	5-9	s.h.
II.	Specia	ılization					11-	20	s.h.
	Requ	ired Courses							
	501.	Curriculum	Content an	d Course	e Organizat	ion		3	s.h.
	502.	Shop Planni	ng and Equ	ipment	Selection			3	s.h.
	603.	Research Ser	minar in In	dustrial	Arts			3	s.h.

#### Electives

Remaining industrial arts courses will be selected from the following offerings, subject to the approval of the graduate advisor. Students must balance laboratory courses with lecture-seminar courses based on needs and interests of each individual.

Labor	ratory		
411.	Industrial Photographic Techniques	3	s.h.
432.	Power Technology	3	s.h.
431.	Advanced Electronics	3	s.h.
422.	Industrial Plastics Techniques	3	s.h.
Semir	aar Courses		
508.	Historical and Contemporary Industrial Arts Literature	3	s.h.
511.	Supervision of Industrial Arts	3	s.h.
601.	Independent Studies in Industrial Arts	3	s.h.

A comprehensive written-oral examination is required of all candidates for the Master's degree with the exception of those students who elect Graduate 600, Master's Thesis, in which the student earns four semester hours credit.

#### Graduate Thesis

Subject to approval by the graduate advisor and the departmental committee.

III. Free Electives 6-8 s.h.

Minimum: 32 s.h.

#### **GRADUATE COURSES**

NOTE: Previous course numbers are enclosed in parenthesis. Students are not permitted to enroll in courses they have previously taken under other titles and/or course numbers.

# Ind. Ed. 501. Curriculum Construction and Course Organization in Industrial Education

3 s.h.

Curriculum construction techniques used in developing a program of industrial arts are studied. Special emphasis is placed on the development of industrial arts courses and instructional materials.

# Ind. Ed. 502. Shop Planning and Equipment Selection in Industrial Education

3 s.h.

Principles of planning and equipment selection for modern industrial arts are studied. The practical application includes architectural aspects, floor plan layouts, equipment selection, bid preparations, and construction of scaled laboratory models.

# Ind. Ed. 503. (508) Historical and Contemporary Industrial Arts Literature

3 s.h.

Published material related to industrial arts is surveyed to determine its applicability to laboratory teaching and professional improvement. This includes historical writings on the development of industry and industrial education, research literature in the field, published materials provided by corporations and government agencies, and pertinent reference works, handbooks, and periodicals.

## Ind. Ed. 504. (511) Supervision of Industrial Arts

3 s.h.

Principles and practices of supervision, as related to the modern industrial arts laboratory are discussed and evaluated. Special attention is given to supervisory techniques, budget supplies, inventories, maintenance, safety, and upgrading of in-service teachers.

# Ind. Ed. 507. Principles and Philosophy of Vocational-Technical Education

2 s.h.

The coordinators of cooperative industrial education programs are provided with the opportunity to study the principles and philosophy of vocational-technical education. The course content presents a brief history of the cultural, social, governmental, economic and technical forces which affected the development of vocational-technical education. The organization and function of the state divisions of vocational education are presented.

# Ind. Ed. 508. Problems in Organizing and Teaching Cooperative Industrial Education Programs 2 s.h.

The coordinator is acquainted with the various practices for coordinating high school programs with the needs for local industry. Emphasis will be placed on the supervising responsibilities within the school, and the cooperation required with public and private agencies.

## Ind. Ed. 509. Curriculum Construction in Vocational-Technical Education

2 s.h.

A survey of vocational curriculum construction techniques designed to meet the needs of related and laboratory teaching and school-work programs. Emphasis will be placed on curriculum materials especially adapted to the needs of part-time cooperative trade occupational programs.

## Ind. Ed. 601. Independent Study in Industrial Arts

3 s.h.

This course is designed to allow students to pursue study on individual problems under the guidance of a sponsoring faculty member. In addition, credit may be obtained for Ind. Ed. 601 upon completion of an approved industrial course related to the student's special area of interest. Registration for this course is by permission of the advisor only.

## Ind. Ed. 603. Research Seminar in Industrial Arts

3 s.h.

Two patterns of research are considered in this seminar: (1) Industrial research techniques with materials and processes as they may be adapted to industrial arts programs in public school, (2) Education research techniques as they are applied to problems in industrial arts education. Prerequisite: Educ. 503.

#### SENIOR-GRADUATE COURSES

#### Ind. Ed. 404. A, B, C, Independent Studies in Industry

2 s.h. each

Each student, under the guidance of a faculty sponsor, is to conduct a depth study of a current problem or topic in an area of industrial education. The study to be performed will be based on a problem jointly developed by the student and his faculty sponsor. A written report of the findings is to be presented.

Admission is by application, through the graduate advisor to Department Chairman.

#### Ind. Ed. 405. Field Studies of Industry

2 s.h.

The purpose of this course is to understand industry and how it functions. A broad range of industrial firms is visited to note and evaluate processes used, materials employed, working conditions instituted and the problems of industry. Representative industries in the metropolitan area are visited. Open to all college students.

#### Ind. Ed. 406 A, B. Cooperative Industrial Work Experience

3 s.h.

Through observation, discussion, written reports and actual supervised experience, the student should become more aware of the attitudes, skills, and knowledge required by modern industry and his responsibility as a public school teacher to this area of society.

The student is aided in finding meaningful summer employment which is directly related to his planned teaching area. He will be paid wages by the cooperating company for his services to it. Course may be taken twice providing second experience is different from the first. (A and B).

#### Ind. Ed. 407. Cooperative Industrial Externship

2 s.h.

Advanced study and research of modern American Technology utilizing the advanced technical knowledge and facilities of cooperating industrial firms. Open to selected graduate and undergraduate students. Participants receive a weekly stipend from the industry for six weeks.

Admission by permission of the Department Chairman.

#### Ind. Ed. 412. Design in Industry

2 s.h.

The industrial designer's approach to the design dictates the material and activities in this course. Students engage in all the activities involved in the design of a product for production and purchase in contemporary society. Open to senior or graduate Industrial Education and Technology and Fine Arts Students.

## Ind. Ed. 423. Architectural Drafting, Residential

2 s.h.

The design and drafting of residential structures is studied. Emphasis will be placed on house construction, architectural drafting techniques and the writing of specifications. Prequisite: Ind. Ed. 121 or approval of the instructor.

#### Ind. Ed. 424. Engineering Graphics

2 s.h.

The fundamentals of descriptive geometry are explored in conjunction with orthographic projection as a system of identifying three dimensional space data for the graphical solution of problems. Particular emphasis will be placed on the applied application to engineering problems. Prerequisite: 28-121 or approval of instructor.

#### Ind. Ed. 433. Photographic Technology

2 s.h.

Photographic equipment, materials, and processes utilized in the graphic arts industry are explored through a variety of experiences in industrial photography. Included are the areas of line and halftone photography, color separation, photolithography, photoengraving, printed circuits, and photomitography. Prerequisite: Ind. Ed. 232 or permission of instructor.

#### Ind. Ed. 443. Wood Technology

2 s.h.

The course encompasses the origins, developments and advances made in the fields of woods. Emphasis is placed upon the nature, identifications, physical characteristics and properties of woods. Stress is given to the study of occupational groups, manufacturing process, industrialization, and mechanization in the wood industry. Prerequisite: Ind. Ed. 342 or approval of instructor.

#### Ind. Ed. 446. Residential Construction

2 s.h.

The materials and processes of residential construction are studied. Students research one or more materials and/or processes now used, or which might be used in house construction. Stress is placed on the processes of house framing and plank and beam construction. Prerequisite: 28-342.

#### Ind. Ed. 456. Plastic Technology

2 s.h.

An advanced technical course in the industrial area of plastics. Study is based upon foundation materials and concerned with developing technical proficiency and mechanical skill in regard to injection molding, extension molding, compression molding, transfer molding and laminating. Prerequisite: Ind. Ed. 381 or equivalent or permission of the instructor.

#### Ind. Ed. 463. Metal Technology

2 s.h.

The study and discussion of current industrial metal working concepts and processes, including quality control, metalurgy, explosive forming, chemical machining, electric discharge machining, numerical control, and principles of automation. Laboratory activities will afford the opportunity for students to become involved in mass production techniques and individual experiments. Prerequisite: Ind. Ed. 262 or approval of the instructor.

#### Ind. Ed. 466. Welding Technology, I

2 s.h.

An introduction to modern welding using both electric arc and oxyacetylene equipment. Students acquire a working knowledge of fundamentals through lecture, demonstration and ample practice sessions. Open to all I.A. students. Required for the Metals Major.

#### Ind. Ed. 467. Welding Technology, II

2 s.h.

A continuation of 28-466. Principles of welding equipment operation and safety are reinforced. Content becomes more specialized as more sophisticated welding operations are introduced. Students continue to log practice hours and qualify for the State Welding Certificate upon successful completion of the course. Designed primarily for the Industrial Arts metals or power major who wishes welding certification. Prerequisite: 28-466.

#### Ind. Ed. 473. Electronics Technology

2 s.h.

Basic theory and application of vacuum tube and semiconductors in power supply, amplifier and oscillator circuits. Laboratory work will consist of directed experiments, project construction, and use of standard instruments. Prerequisite: Ind. Ed. 372 or permission of instructor.

#### Ind. Ed. 483. (432) Power Technology

2 s.h.

An advanced technical study of internal and external combustion engines and a fluid power. In addition to the study of established engines, power sources in the developmental stage will be examined. Much of the course work will consist of work on individual problems in power. Prerequisite: Ind. Ed. 252 or permission of the instructor.

#### Ind. Ed. 496. (421) Jewelry Making and Lapidary

2 s.h.

Through laboratory experiences students have the opportunity to develop lapidary and jewelry making skills. They will design pieces that will involve casting and wrought jewelry processes. The lapidary experiences cultivate skills in sawing, shaping, polishing, and mounting stones to exhibit their inheren qualities.

## DEPARTMENT OF MATHEMATICS

Graduate Advisor: PROFESSOR PAUL C. CLIFFORD

The courses listed in the Mathematics offering are designed to meet three specific needs. To meet the needs of the teacher of mathematics, the department offers a Masters of Arts Degree in Mathematics. To meet the needs of those interested in an extensive study of both mathematical theory and its applications in science and industry, the department offers a Masters of Arts Degree in Pure and Applied Mathematics. And for those whose mathematical education needs to be updated, the department offers a series of courses and workshops. The courses numbered from 400 to 419 and from 500 to 519 are for this purpose. Such courses may not be credited towards either M.A. degree without special permission from the Graduate Advisor.

## REQUIREMENTS FOR MATRICULATION

A candidate for the Master of Arts Degree in Mathematics should consult the Graduate Advisor of the Mathematics Department before matriculation since the choice of graduate courses should be adjusted to the preparation acquired in undergraduate work. The student's work program, for a minimum of thirty-two semester-hours of work, is prepared in consultation with the Graduate Advisor. Any changes in the work program are made only with the written approval of that advisor.

The candidate for the M.A. degree in Pure and Applied Mathematics must present an undergraduate major of at least 3 semester hours in mathematics. Courses in engineering and science that have a substantial mathematical content may be submitted toward this requirement.

The candidate for the M.A. degree in Mathematics must present an undergraduate major of at least 24 semester hours.

## REQUIREMENTS FOR THE M.A. IN PURE AND APPLIED MATHEMATICS

I.	Required Courses: Math 521, 525, 531, and 535	8 s.h.
II.	Mathematics Electives: Pure and Applied Mathematics Courses with	
	at least 12 semester hours at the 500 level. Such courses are numbered	
	from 520 to 569 and from 420 to 469	
Ш.	Free Electives	6 s.h.
	Selected from mathematics, mathematics education or in other graduate courses offered at the college	

REC	REQUIREMENTS FOR THE M.A. IN MATHEMATICS									
I.	Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h.									
П.	Specialization 11-20 s.h.									
	Each candidate must take at least one course in each of the following sets:									
	Math, 521 or 525									
	Math. 531 or 535 2 s.h.									

Math. 554 or 555	
Math. 590	
Electives (after consultation with Graduate Advisor)	-8-s.h.

#### III. Free Electives

6-8 s.h.

Minimum: 32 s.h.

## IV. Departmental Examination

A final examination in mathematics is given to all candidates prior to the conferment of the degree. This examination is general in nature and is designed to test the candidate's maturity of thought in mathematics and/or mathematics education.

## **GRADUATE COURSES**

NOTE: Previous course numbers are enclosed in parentheses, Students are not permitted to enroll in courses they have taken previously under other titles and/or course numbers.

## Math. 510. (603A) Workshops on Junior High School Mathematics I 2 s.h.

This course provides the necessary mathematical background to understand and interpret current curriculum recommendations in the Junior High School. Suggestions for implementation of new topics discussed. Areas covered include: presentation and structure of the number system, mathematical systems, foundations of algebra, and probability.

## Math. 511. (603B) Workshop on Junior High School Mathematics II 2 s.h.

This course is a continuation of Math 510. Major attention is given here to the areas of geometry and measurement.

#### Math. 515. (602A) Workshop on Senior High School Mathematics I 2 s.h.

This course is designed to provide teachers with increased insight into contemporary programs of mathematics. Emphasis is placed on mathematical principles and concepts, together with suggestions for implementation of new topics in revisions of secondary school mathematics programs. Major attention is given to programs of algebra in the high school curriculum.

## Math. 516. (603B) Workshop on Senior High School Mathematics II 2 s.h.

This course is a continuation of Math. 515, with similiar aims and objectives. Major attention is given here to implementation of modern programs of geometry, as well as to the senior year program in high school mathematics.

## Math. 520. (517) Set Theory

2 s.h.

This course develops the groundwork on which most of modern mathematics depends. Topics include: historical development, classical paradoxes, relations, mappings, equivalence, ordered sets, choice functions, Zorn's lemma, transfinite cardinal and ordinal algebra.

#### Math. 521. (518) Theory of Functions of Real Variables

2 8.

The fundamental properties of real numbers and the elementary properties of functions of real variables are systematically developed. Among the topics considered are: continuity, differentiability, integrability, algebraic and transcendental functions, hyberbolic functions, and infinite series. Prerequisite: Math. 425 (407).

## Math. 525. (519) Theory of Functions of Complex Variables

2 s.h.

The fundamental properties of complex numbers and elementary properties of functions of complex variables are developed. These include the properties of mapping, line integrals, Cauchy-Goursat Theorem, and conformal mapping.

#### Math. 531. (503) Abstract Algebra

2 s.h.

This course is a study of unique functionization domains, extension fields, and the solution of the general nth degree equation. Prerequisite: Math. 330 or the equivalent.

# Math. 535. (504) Linear Algebra

2 s.h.

This course develops the theory of finite dimensional linear spaces. Topics include: linear vector spaces, bilinear and quadratic forms, Euclidean and unitary spaces. Prerequisite: Math. 430 or equivalent.

### Math. 540. (523) Theory of Probability

2 s.h.

This course develops probability theory as a mathematical model describing random phenomena. Topics include: basic probability theory for finite sample spaces, random variables and functions of random variables, particular probability distributions, certain limit theorem, sequences of random variables and Markov processes. While the emphasis is on mathematical proof, a variety of applications in both the physical and the social sciences are developed. Prerequisite: 340 or 412 (307 or 422).

### Math. 542. (524) Introduction to Mathematical Statistics

2 s.h.

This course is concerned with making inferences from sample data and with evaluating risks connected with these procedures. Topics include: sampling distributions, point and interval estimation, tests of hypotheses, regression and correlation, elements of analysis of variance and nonparametric statistics. Prerequisite: Math. 443 or 540 or equivalent.

### Math. 545. Techniques of Statistical Control

2 s.h.

Statistical techniques for analyzing process variability, establishing control and setting standards. Topics include: Parete analysis, frequency distribution analysis, control charts for variables, control charts for attributes, simplified control procedures, acceptance sampling by attributes and variables and adaptations of these procedures for designed experiments.

### Math. 547. Design and Analysis of Experiments

2 s.h.

This course emphasizes the basic ideas underlying modern developments in the design and analysis of experiments. Topics include: experimental error, Randemization, factorial experiments, randemized blocks, Latin squares, fractional replication, response surface together with regression, correlation and the analysis of variance and covariance.

# Math. 554. (532) Projective Geometry

2 s.h.

The methods of synthetic and analytic projective geometry are compared and used to emphasize the fundamental concepts of Euclidean Geometry. Emphasis is placed upon the dependence of many common properties and theorems of Euclidean geometry and upon the properties of lines, parallelism, perpendicularity, similiarity of figures, and the definition of distance. Prerequisite: Math. 450 (412).

### Math. 555. Differential Geometry

2 g.h.

The application of vectors to the study of classical three dimensional geometry. Topics include: the theory and application of space curves, surface curvature, Geodesics and the first and second fundamental forms.

# Math. 560. (512) Numerical Analysis

2 s.h.

This course deals with the determination of functions from observed experimental data. Among the topics considered are: finite differences, symbolic operators, differencing, interpolation formulae, the method of least squares, and harmonic analysis. The course is designed to show the nature of mathematics as an applied science.

### Math. 561. (513) Computer Programming

2 s.h.

This course is concerned with the use of a computer to solve problems, including some secondary school mathematics. Problem solving methods suitable for a store-program computer and the programming languages are considered. Prerequisite: Math. 560 (512) or permission of the instructor.

# Math. 563. Mathematics in Social Science

2 s.h.

This course examines selected applications of mathematics in such fields as economics, psychology, sociology, and management sciences. Applications to these areas of differential equations, matrices, and probability and statistics are considered.

### Math. 565. (552) Applied Mathematics I

2 s.h.

This course consists of selected topics in matrices, Fourier series and vector analysis with emphasis on their applications to the physical sciences and the physical meaning of the results.

# Math. 566. (553) Applied Mathematics II

2 s.h.

This is a continuation of Mathematics 565. Topics from partial differential equations, the calculus of variables, and series solution of Legendre's and Bessel's equations are treated. Prerequisite: Math. 565.

# Math. 570. (501) Administration and Supervision of Mathematics 2 s.h

This course is concerned with the problems met in organizing and supervising the teaching of mathematics. The topics considered are the functions and qualifications of the supervisor of mathematics, in-service training of teachers, demonstration lessons, professional attitude and preparation of teachers, department meetings, selection of texts, current problems, research; and the basis for determining objectives.

# Math. 571. (529) Curriculum Construction in Mathematics

2 s.h.

In this course a careful study is made of contemporary programs proposals for the mathematics of grades K through 12. Consideration is given to the problem of implementation of current recommendations. Examination is made of the mathematical concept underlying various programs.

### Math. 572. (507) Teaching of General Mathematics

2 s.h.

This course is concerned with mathematics programs for the non-college-bound high school student. Reports and recommendations from curriculum studies are examined. Among the topics considered are: basic characteristics and needs of non-academic students, preparation and use of resource materials, classroom teaching techniques, and methods of motivation. Emphasis is given to the development of suitable curricula for non-academic students.

# Math. 573. (530) Mathematics Materials for the Teacher of Mathematics 2 s.h.

This course is concerned with the adaptation and use of materials to motivate and improve the teaching of high school mathematics. Particular attention is given to the equipment needed for a modern mathematics laboratory; to the effective use of such audio-visual equipment as the overhead projector; to the use of mathematical films and film-strips; to the construction and use of mathematical models; and to books, periodicals, and pamphlets needed for the school and for the teacher's library. Material available for individual and club activities in mathematics.

### Math. 574. Problem Analysis in Secondary Mathematics

2 s.h.

The psychology and techniques of solving. Discovery and heuristic methods. Intuitive and inductive reasoning in the solution of non-routine problems from high school mathematics. Problem formation and test construction.

### Math. 590. (640) Research Seminar in Mathematics Education

2 s.h.

This course is designed to give graduate students an opportunity to investigate and apply the techniques of research in the field of mathematics education. Various projects are discussed and each member selects and presents a research topic on his own. Prerequisite: Ed. 503.

### SENIOR-GRADUATE COURSES

# Math. 403. (423) Techniques and Applications of Statistics

2 s.h.

This course is designed as a basic survey of statistical techniques as applied in the social and behavioral sciences. Fundamental concepts and assumptions are stressed and justified experimentally, although mathematical proof of theorems is strictly limited. Topics include: descriptive statistics, elements of probability, sampling procedures and sampling statistics, tests of hypotheses and simple design of experiments. Students are expected to have an adequate background in high school algebra. This course is offered as a general education elective and may not be taken for credit by mathematics majors. Prerequisite: Math. 105.

# Math. 406. (410) Mathematics of Finance

2 s.h.

This course introduces the elementary theory of simple and compound interest and leads to the solution of practical problems in annuities, sinking funds, amortization, depreciation, stocks and bonds, installment buying, and savings and loan associations. It discusses the mathematics of life insurance covering the following: the theory of probability as related to life insurance; the theory and calculation of mortality tables; various types of life annuities and insurance policies and reserves. This course gives a helpful background to the mathematics teacher and aids the student of economics and insurance.

# Math. 411. Elements of Mathematical Thought

2 s.h.

This course acquaints students having a limited background in mathematics with the logical structure of mathematics. There is an emphasis on postulational foundations and the reasoning process itself. Topics include: the nature of mathematical knowledge, the origin and influence of logical systems, essentials of logical reasoning, and examples of logical systems from algebra and geometry.

### Math. 412. (422) Introduction to Probability and Statistics

2 s.h.

This course surveys the major concepts of elementary probability and statistics and serves as an introduction for students who have had no previous work in this field. Topics include: probability theory for finite sample spaces, elements of combinatorial theory, binomial distributions, continuous distributions, functions of random variables, and problems of estimation and tests of significance. Students credited with Math. 340 (307) may not take this course for credit.

### Math. 415. (405) History of Mathematics

2 s.h.

This course strives to present a comprehensive history of elementary mathematics. Separate histories of geometry, number theory, algebra, calculus and infinite processes are developed with consideration of mathematical problems solved in their historical content. Among the great mathematicians considered are: Eudoxus, Pythogoras, Euclid, Archimedes, Appolonius, Diophantes, Fibonacci, Gardan, Vieta, Napier, Descartes, Fermat, Newton, Liebritz, Euler, Gauss, Riemann and Ramanjan.

### Math. 416. (409) Elements of Finite Mathematics

2 s.h.

Topics considered in this course are those dealing with finite, rather than infinite sets. Included are such topics as: sentences and statements, truth tables, sets, Boolean algebra, and linear programming. Applications of mathematical techniques in the social sciences are stressed throughout the course.

### Math. 417. (453) Differential Calculus

3 s.h.

Concepts of differential calculus are developed for science students who have taken one year of college mathematics. Topics include: functional relationships, slope, limit, continuity, graphical representations of science problems, differentiation of algebraic and transcendental functions, geometric and physical application of derivatives, velocity, and acceleration in curvilinear motion. Applications are developed utilizing the scientific background of the students. Students credited for Math. 221 may not take this for credit.

### Math. 418. (454) Integral Calculus

3 s.h.

Concepts of integral calculus are developed for students who have completed Math. 417 (453) or equivalent. Topics include: integration procedures, solid analytic geometry, and geometric and physical applications of the definite integral in two and three dimensional problems. Applications utilize the scientific background of the students. Students credited with Math. 222 may not take this for credit (Not offered every year).

### Math. 419. (404) Modern Mathematical Literature

s.h.

The objective of this course is to familiarize the student with the mathematical literature available to him as a mathematics teacher. The student is expected to examine a variety of publications to determine the content, worth, and possible use.

### Math. 420. (415) Differential Equations

2 s.h.

Applications of differential equations and their standard methods of solution are treated in this course. Topics are: linear differential equations of the first degree and of the first and higher orders, linear equations of the nth order with constant coefficients, linear equations of the second order, exact and total differential equations, simultaneous equations, numerical approximations, and series solutions.

# Math. 425. (407) Advanced Calculus I

3 s.h.

This course develops the calculus of a function of one variable as a mathematical system. On the basis of postulates for the real numbers, the concepts of function, limit, sequence, infinite series, power series, continuity, uniform continuity, differentiation, and integration will be rigorously developed. Topics considered include: Archimedean principle, density of the rationals, intermediate value theorem, Heine-Borel theorem, mean value theorem, Cauchy convergence criterion, existence theorems, and uniform convergence theorems.

# Math. 426. (408) Advanced Calculus II

3 s.h.

In this course the calculus of functions of several variables is thoroughly treated. Among the topics to be considered are: The Implicit Function Theorem, The Inverse Function Theorem, Green's Theorem, Stokes Theorem, Cesaro Convergence and Fouier Series.

# Math. 428. (432) Introduction to Topology

3 s.h.

The aim of this course is to introduce the student to some of the terminology, concepts, and methods of a rich branch of mathematics which has proved to be a fertile area for current research in mathematics. Special emphasis is to be placed on the "topological" structure of the familiar real line (set of real numbers), ordinary Euclidean space, and metric spaces in general. This course is designed to provide a background for both understanding more fully the results of classical analysis (calculus), and for studying "modern" analysis.

### Math. 430. (414) Vectors and Matrices

3 s.h.

This course is a study of vector spaces and matrix algebra. Topics include: vectors and vector spaces, systems of linear equations, matrices, determinants and linear transformations. Prerequisite: Math. 330.

### Math. 433. (417) Theory of Numbers

2 s.h.

This course offers a systematic development of classical number theory along with a discussion of the historical background. The treatment employs current set-theoretic notation to make the traditional topics more meaningful. It includes such topics as prime and composite numbers, Euclid's algorithm, congruences, diophantine equations, quadratic residues, and the Euler-Fermat theorems.

### Math. 436. (480) Elements of Logic

2 s.h.

This course develops an understanding of methods of reasoning used in the mathematical sciences. The point of view of elementary processes of symbolic logic are studied. Background materials are included for teaching of logical concepts in secondary schools.

### Math. 443. (413) Statistics: Theory and Applications

3 s.h.

After a brief review of probability in the discrete case, this course develops the general theory of probability functions and distributions for first one and then several random variables. Topics include: Mathematical expectation, continuous random variables, distribution of sums of random variables, sampling distributions, points and interval estimation, regression and correlation, tests of hypothesis, Various classroom experiments are used to guarantee sample data. Prerequisite: Math. 340.

# Math. 450. (412) Foundations of Geometry

3 s.h.

In this course a study is made of the Hilbert postulates and the Birkhoff-Beatley Postulates of Euclidean Geometry. The course includes a comparison of the non-Euclidean geometries and a brief introduction to synthetic and analytic projective geometry. Prerequisite: Math. 350.

### Math. 460. Introduction to Applied Mathematics

2 s.h.

Applications of mathematics to the physical and biological sciences will be discussed. The uses of various mathematical concepts in the PSSC, CHEM Study, BSCS and ECCP curricula will be examined. Topics include: applications of vectors, matrices, progressions, series, limit concepts, digital and analog computers, and analysis of experiments. The vehicle will be the specific applications in selected areas of the biological sciences and the physical sciences.

# Math. 470. (401) Teaching of Mathematics—Senior High School 2 s.h.

This course covers the selection, organization, and presentation of mathematics in the senior high school. Topics include: organization of classroom activities, lesson planning, techniques of motivation, evaluation, use of multisensory aids, and applications of established principles of learning. These topics will emphasize the methods and materials of teaching contemporary programs of geometry, intermediate algebra, and twelfth-grade pre-college mathematics. Observation and participation in the campus demonstration high school is required.

# Math. 472. (440) Contemporary Programs in Secondary Mathematics 2 s.h.

This course is concerned with an exploration of contemporary curricula in secondary mathematics with emphasis on those programs which are currently being implemented. The recommendations of various curriculum studies are explored. Major emphasis is given to the programs of grades eleven and twelve, including advanced placement.

# DEPARTMENT OF MUSIC

Graduate Advisor: DR. DOROTHY J. MORSE

# Graduate study in the Department of Music is designed:

- 1. to offer music teachers in the New Jersey public schools an opportunity to gain further professional preparation for the improvement of their teaching skills.
- 2. to provide an opportunity for students to deepen and enrich their program in general education; to enable them to acquire a more advanced grasp of the problems in professional education; and to move forward in their fields of specialization;
- to encourage the spirit of scientific inquiry and creative, original, and independent thought by providing training and experience in educational research;
- 4. to encourage the teacher to gain the requisite status for professional advancement.

# Admission to the Program

A student with an undergraduate major in music is admitted subject to general College graduate admission requirements as stated elsewhere in this catalog.

# Requirements for the M.A. Degree in Music

I.	Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.	.h.							
	A. Education 503	.h.							
	B. Electives 4-7 s	.h.							
II.	Specialization Courses 11-20 s.	.h.							
	A. Required of all Candidates—								
	Music 603—Seminar in Research								
	in Music Education	.h.							
	B. Remainder of specialized courses chosen by								
	student and advisor on basis of need from the following courses:								
Mu	sic Methods								
	Music 520A. Problems and Materials of Instrumental Music 2 s								
	Music 520B. Problems and Materials of Choral Music								
	Music 521A. Classroom Methods: Piano								
	Music 521C. Classroom Methods: Woodwinds								
	Music 521D. Classroom Methods: Strings								
	Music 521E. Classroom Methods: Percussion								
	Music 521F. Classroom Methods: Vocal	.h.							
History and Literature									
	Music 406. Modern Music	.h.							

Music 407.Development of the Opera2 s.h.Music 413.Masters of the Symphony2 s.h.Music 424.Survey of Wind Instrument Music2 s.h.

use of materials.

Theory and Harmony

Music 417.

Wildie 510. Playaneed another (Classification)				
(Note: Candidates who pass, by examination, Music 511 Aural Theory, matake Music 512 Advanced Theory)	y			
Skills				
*Music 503A. Applied Music I: Primary Instrument 2 s.l.  *Music 503B. Applied Music II: Primary Instrument 2 s.l.  *Music 510A. Applied Music I: Secondary Instrument 1 s.l.  *Music 510B. Applied Music II: Secondary Instrument 1 s.l.  Music 530. Advanced Conducting 2 s.l.	h. h. h.			
*See Special Tuition Charges For Applied Music Study				
III. Free Electives 6-8 s.	h.			
IV. Comprehensive Examination (See requirements for M.A. Degree sub-heading Comprehensive Examination.)				
V. Thesis Optional (See Thesis.)  Minimum: 32 s.	h.			
Special Tuition Charges For Applied Music Study				
Instruction in applied music (Mus. 503A, 503B, 510A, 510B) is on an individual basis and a special fee is charged in addition to the regular college fees and tuition. Students registering in a one semester-hour course pay an additional \$75.00 and those in a two semester-hour course, \$150.00 for private instruction.				
Before registering in applied music, consult with the Graduate Advisor for the Music Department.	or			
GRADUATE COURSES				
Music 503A. Applied Music I. Primary Instrument  Advanced study in a familiar medium for the serious and accomplished student. The cour will be adapted to the musical and technical needs of the individual with opportunities availab for recital performances. Fifteen one-hour lessons, private instruction. Admission by examination only.	se			
Music 503B. Applied Music II: Primary Instrument A continuation of Music 503A.	h.			
Music 510A. Applied Music I: Secondary Instrument  An elementary course, both for the beginner and for the student with limited backgroun Fifteen half-hour lessons per semester, private instruction. Admittance by audition.				
Music 510B. Applied Music II: Secondary Instrument A continuation of Music 510A.	n.			
Music 511. Aural Theory  Review of diatonic harmony (figured bass, triads, sevenths and ninth chords in all inversion modulation, etc.) through extensive dictation, eight singler harmonization, analysis, and creekly	18,			
MICHIGARDIL, CIC. I INTORES EXTENSIVE dictation sight singing harmonization analysis and creative	70			

modulation, etc.) through extensive dictation, sight singing, harmonization, analysis, and creative

Music 511.Aural Theory2 s.h.Music 512.Advanced Aural Theory (Prerequisite: Music 511)2 s.h.Music 513.Composition (Prerequisite: Music 511)2 s.h.Music 516.Advanced Instrumentation (Prerequisite: Music 511)2 s.h.

# Music 512. Advanced Aural Theory

2 s.h.

Chromatic harmony presented as a continuation of Music 511. Altered chords as found in the music of Bach, Beethoven, Brahms, and Tchaikovsky. Included are dictation, sight singing, harmonization, analysis, and creative writing. Prerequisite: Music 511 or equivalent.

# Music 513. Composition

2 s.h.

Practice in the writing of variations, small forms, songs and music for small ensembles. Analysis and workshop performance are included. Prerequisite: Music 511 or equivalent.

### Music 516. Advanced Instrumentation

2 s.h.

A workshop course in instrumentation as applied to both orchestra and band. Principles of *Tuttl* instrumentation as applied to both media. Scoring for smaller ensembles. Study of instruments, instrumental families and their possibilities and best uses. Direct instrumental setting of school, songs, hymns, etc., without the writing of a score. Elements of band military march construction and scoring. Every student will hear at least one of his instrumentations played by the college orchestra or band. Prerequisite: Music 511 or equivalent.

### Music 520A. Problems and Materials of Instrumental Music

2 s.h.

This course aims to (1) evaluate teaching experiences, (2) develop an understanding of the problems of the instrumental organization in the school, (3) develop additional knowledge and understandings of the literature for orchestra, band, and a variety of small ensembles at all levels.

### Music 520B. Problems and Materials of Choral Music

2 s.h.

This course provides a survey of the choral repertoire for accompanied and a cappella groups, for changed, unchanged, changing, and mixed voices. The course includes historical and stylistic characteristics of the choral repertoire. Materials for small groups, as well as large ones, are analyzed for performance value. Criteria for evaluating available materials, program building for all school needs, including holidays, festivals, radio and television performances are an integral part of the course. The members of the class comprise a laboratory chorus for the study of the repertoire.

### Music 521. Classroom Methods

2 s.h. each

Elementary and secondary classroom methods in the various media; the course deals with the principles, materials, and methods used in teaching class instrumental and vocal music. Especially designed for teachers seeking new ideas in teaching basic principles of the various instruments, including voice.

521A. Piano

521B. Brass Instruments

521C. Woodwind Instruments

521D. Stringed Instruments

521E. Percussion Instruments

521F. Vocal Classes

### Music 530. Advanced Conducting

2 s.h.

A course in basic conducting practice with emphasis on the practical problems of public school instrumental work. Technique of the baton, clef reading and simple score playing at the piano, transposition, score reading, technique of rehersal and drilling, conducting of instrumental ensemble accompaniments. Prerequisite: A college course in instrumental or vocal conducting or its equivalent in practical experience satisfactory to the instructors.

### Music 603. Seminar in Music Education

2 s.h.

This course is designated primarily to provide an opportunity for graduate students in music education to investigate and apply the techniques of research in the music education field. Prerequisites: Matriculation for M.A. degree, Educ. 503, or concurrently registered in Educ. 503.

### SENIOR-GRADUATE COURSES

#### Music 406. Modern Music

2 s.h.

This course is planned to acquaint the student with contemporary music and is a continuation of Music 208. It includes a study of the music of Debussy, Stravinsky, Schoenberg, Berg, Bartok, Hindemith, etc. Students are expected to compose short pieces in contemporary idioms. Prerequisite: a college course in music history or its equivalent satisfactory to the instructor.

Music 407. Development of the Opera

2 s.h.

This course deals with the origin, development, and the characteristics of opera in the Italian, French, German, and Russian schools. Class analyses are made of representative operas of these schools. Special attention is given to building an ear repertory of operatic music heard over the radio.

Music 413. Masters of the Symphony

2 s.h.

This course helps to provide the student with an understanding and appreciation of the classic and romantic symphony through the study of the symphonies of Haydn, Mozart, Beethoven, Schubert, Schumann, Tchaikovsky, and Brahms. Class analyses, including the reading of scores, are made of representative symphonies. Elective for non-music majors.

Music 417. Theory of Sound

2 s.h.

The phenomena of sound as related to hearing, to music theory, to musical instruments, to the reproduction of music (phonograph, etc.) and to the conditions under which music is heard.

Music 424. A Survey of Wind Instrument Music

2 s.h.

This course includes music for full band, small ensembles, and solos with emphasis on literature available for brass and woodwind players in the elementary and the high school. A laboratory band as well as numerous small ensemble groups are formed by members of the class so that performance of all music under consideration is possible. Special attention is given the music originally composed for wind instruments. New music from all publishers is available for examination and evaluation.

# DEPARTMENT OF PSYCHOLOGY

Graduate Advisor: DR. HERBERT J. HAUER

The Master of Arts degree in the field of Psychology is designed to provide advanced work. Upon completion of the program the student may terminate his formal studies, go on for a professional diploma and certification as a school psychologist, or pursue a higher degree.

The School Psychologist Certification program is designed to provide the background for certification in school psychology. The professional diploma program will help meet the need for certified school psychologists by offering an integrated sequence of courses together with closely supervised training.

The demand for certified school psychologists in New Jersey is urgent. Since the first Beadleston law in 1954, the demand has increased tremendously. School Administrators cannot find qualified personnel to meet the need.

# Requirements for Admission to the Program

Candidates for the M.A. program must meet admission requirements of the Graduate Division of the College, as stated in the current Graduate Bulletin.

In addition, candidates for the school psychologist's diploma (beyond the M.A.) must meet the following conditions:

- 1. High achievement on the Graduate Record Examinations. A score of 550 or better on the verbal section of the Aptitude Test.
- 2. Candidates must obtain a raw score of 55 or better on the Miller's Analogies Test,
- 3. Candidates will be required to submit recommendations from at least two individuals who can attest to their ability to cope with advanced graduate work and can comment on their suitability for the program.
- 4. Approval by a School Psychology Admissions after a personal interview and approval by the Department Chairman.
  - 5. Hold a N.J. Standard Teacher Certificate.
  - 6. Evidence of one year of teaching experience.

Failure to meet the standards on any one of the above requirements will not automatically rule out an applicant for admission or completion of the program. Variations in test scores will be considered.

# REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN PSYCHOLOGY

Ī.	Basic Requir	ements		15	s.h.
	Ed.	503	Methods and Instruments of Research	. 2	s.h.
	Psych.	560	Advanced Educational Psychology	. 3	s.h.
	Psych.	660	Seminar in Educational Psychology	. 2	s.h.
	Psych.	578	Psychological Tests and Measurements	. 3	s.h.
	Psych.		Child and Adolescent Development		
	Math.	403	Techniques and Applications of Statistics	. 2	s.h.
				15	s.h.

	1	T7	l-45one	6 s.h.	
II. Ed	lucational		Educational Sociology		
	Ed.	406	Introduction to Educational Administration	2 s.u.	
	Ed.	510 512	School Community Relations	2 s.n.	
	Ed. Ed.	530	Curriculum Construction in the Secondary School or	2 s.h.	
	Ed.	538	Curriculum Construction in the Elementary School		
	Ed.	533	Philosophy of Education	2 s.h.	
	Soc. St.		Community Resources and Youth		
		595A	Foundations of Education I		
	*Ed.	595B	Foundations of Education II		
	*Ed.	595C	Structure and Administration of American Schools		
III. Sp	ecializatio	n		6 s.h.	
A	. Select 6	s.h. fr	om the following:		
	Psych.	564			
	,		Mentally Handicapped	3 s.h.	
	Psych.	565	Psychology and Education of the Socially and		
			Emotionally Handicapped	3 s.h.	
	Psych.	572	Teaching the Mentally Handicapped		
				6 s.h.	
B.	Select 5	s.h. fr	om the following:		
	Ed.	585	Group Guidance and Counseling Activities		
	Psych.	563	Theories of Learning		
	Psych.	573	Physiological Psychology		
	Psych.	566	Psychology and Education of the Gifted		
	Ed.	552	Principles of Reading Improvement in the Secondary		
	Darroh	579	School Psychological Group Tests		
	Psych. Ed.	588	Techniques of Interviewing and Counseling		
	Psych.	562	Dynamics of Human Behavior		
	1 3y 011.	302		5 s.h.	
IV. Co	mprehens	ive Ex			
Ca	indidates i	for the	Master of Arts Degree are required to pass a co	mpre-	
			n, to be taken during the spring term just prior to gr		
tie	on.				
W.T. A	41.1				
			hoose to write a thesis providing he receives the app		
			r semester hours credit will be given for the completied to will be included in Area III.	on or	
a	inesis and	the cre	edits will be included in Alea III.		
			ho do not possess a teaching certificate (courses ar	e de-	
signed	for M.A.T	Γ. stude	nts)		
REOU	IREMEN'	T FOR	CERTIFICATION for N.J. State Certificate as a S	chool	
Psycho	logist		obstitution for its, state confinence as a c	CHOOL	
Δ	etudent r	who he	Ido on M.A. doores in Developer from Montalei	:11	
round	out his pr	ouram	olds an M.A. degree in Psychology from Montclain to the totals shown below. A student seeking certific	will	
(and v	who is no	t a car	ndidate for the M.A.) will follow the program ou	tlined	
below.	120 10 110	t a ca	nature for the will, (1) will follow the program ou	timed	
1. E			ations (Select 12 s.h. from the following:)		
	Ed.	406	Education Sociology		
	Ed.	510	Introduction to Educational Administration	2 s.h.	
	Ed.	512	School Community Relations	2 s.h.	
	Ed.	530	Curriculum Construction in the Secondary School or	2 s.h.	

	Ed.	538	Curriculum Construction in the Elementary School 2 s.h.		
	Ed.	533	Philosophy of Education		
	Soc. St.	565	Community Resources and Youth		
	*Ed.	595A	Foundations of Education I or II		
	or 595B		each		
	*Ed.	595C	Structure and Administration of American Schools 3 s.h.		
			12 s.h.		
II.	Education o	f the H	landicapped Required 6 s.h.		
	Psych.	564	Psychology and Education of the Physically and		
	•		Mentally Handicapped 3 s.h.		
	Psych.	565	Psychology and Education of the Socially and		
			Emotionally Handicapped 3 s.h.		
	Psych.	572	Teaching the Mentally Retarded 3 s.h.		
			6 s.h.		
III.	Testing and	Clinica	al Techniques Required 25 s.h.		
	Math.	403	Techniques and Applications of Statistics 2 s.h.		
	Ed.	588	Techniques of Interviewing and Counseling 2 s.h.		
	Psych.	574	Individual Intelligence Testing		
	Psych.	575	Projective Techniques I		
	Psych.	576	Projective Techniques II		
	Psych.	590	Diagnostic Case Studies I		
	Psych.	578	Pyschological Tests and Measurements 3 s.h.		
	Psych.	661	Practicum in School Psychology		
	Psych.	662	School Psychologist Externship 3 s.h.		
			25 s.h.		
IV.	Personality (	and Be	havioral Development Required 12 s.h.		
	Psych.	561	Child and Adolescent Development 3 s.h.		
	Psych.	450	Psychological Foundations of Personality 3 s.h.		
	Psych.	563	Theories of Learning		
	Psych.	573	Physiological Psychology		
	Psych.	562	Dynamics of Human Behavior		
	Anthrop	ology e	elective 3 s.h.		
			12 s.h.		
V.	Electives		select courses to balance a program of 60 s.h.		
	Ed.	585	Group Guidance Techniques		
	Psych.	591	Diagnostic Case Studies II		
	Psych.	566	Psychology and Education of the Gifted		
	Ed.	552	Principles of Reading Improvement in the		
			Secondary School		
	Psych.	579	Psychological Group Tests		
			balance		
	*Other relevant courses listed in the Graduate Catalog (subect to the ap-				

\*Other relevant courses listed in the Graduate Catalog (subect to the approval of the Graduate Advisor.)

### **GRADUATE COURSES**

### Psychology 560. Advanced Educational Psychology

3 s.h.

This course focuses on the learner and the learning process in school situations. The topics include: motivation; acquisition of skills, ideas, and attitudes; technological and other innovations in teaching and learning; and evaluation of teaching-learning. Prerequisite: an introductory course in psychology.

### Psychology 561. Child and Adolescent Development

3 s.h.

This course reviews the general characteristics of child and adolescent development: motor and physiological, social, emotional, language, intellectual, and interests and ideals. The influ-

ences of home, school, community, and institutional life on child and adolescent development are considered as well as problems of guidance presented by children in the normal course of development as well as those presented by deviations from the normal course.

# Psychology 562. Dynamics of Human Behavior

2 s.h.

In this course consideration is given to the relationships of social forces to mental health. Special emphasis is placed on environmental factors which contribute toward behavioral and learning pathologies. A unit on group dynamics is included.

# Psychology 563. Theories of Learning

3 s.h.

Reviews the principle phenomena of current learning theory and research and their implications for education. Prerequisite: Two courses in psychology or special permission of the instructor. Some background in biology is recommended.

# Psychology 564. Psychology and Education of the Physically and Mentally Handicapped Children 3 s

This course surveys current practices and problems in the education of the children with physical and mental handicaps. It is designed for teachers, counselors, supervisors, and administrators who may work with one or more such children or who may wish to prepare for school and community leadership in developing facilities for such children. Prerequisite: A course in child and/or adolescent psychology.

# Psychology 565. Psychology and Education of Socially and Emotionally Handicapped Children 3 s.h.

This course surveys current practices and problems in the education of socially and emotionally handicapped children. It is designed for teachers, counselors, supervisors, and administrators who may work with one or more such children or may wish to prepare for school and community leadership in developing facilities for such children. Prerequisite: A course in child and/or adolescent psychology.

# Psychology 566. Psychology and Education of the Gifted

s.h.

This course is designed to present a complete picture of the bright and gifted young people in contemporary American life. It surveys the various practices involved in their education, as well as the psychological characteristics of this group and socio-emotional development. It is designed for teachers, counselors and administrators, and is conducted on an advanced level, allowing sufficient time for seminar discussions in addition to lectures.

### Psychology 572. Teaching the Mentally Retarded

3 s.h.

Deals with the total curriculum for educable and trainable children in special classrooms. Emphasis is placed on the development of programs in which such children can acquire basic social, motor, and communication skills. Procedures for teaching such skills are covered and field visits to special classes are provided.

### Psychology 573. Physiological Psychology

2 ~ 1

An investigation of physiological correlates of behavior with emphasis on the sensory apparatus as well as the major neuro-endocrine integrating relationships as seen in the more complex behaviors, such as emotion, the primary drives, and arousal states. Prerequisites: one course in psychology and biology or by special permission of instructor.

# Psychology 574. Individual Intelligence Testing

3 s.h.

Considers administration, scoring, and interpretation of individual intelligence tests. Each student is requird to develop competence in the use of the Stanford-Binet Scale and the Wechsler Intelligence Scale for Children. Prerequisite: M.A. matriculant or approved certification candidate in psychology.

### Psychology 575. Projective Techniques I

3 s.h.

Presents the basic instruments of projective testing, particularly the Rorschach and Thematic Apperception Tests, both from the standpoint of basic research and of the mechanics of administration and scoring. Prerequisite: M.A. matriculant or approved certification candidate in psychology.

# Psychology 576. Projective Testing Techniques II

3 s.h.

This course enables the student to move from the theoretical to the practical application of projective tests. Each student is required to administer, score, and analyze individual cases. The major emphasis is on the Rorschach and Thematic. Apperception Tests. Prerequisite: M.A. matriculant or approved certification candidate in psychology.

# Psychology 578. Psychological Tests and Measurements

3 s.h.

An introductory survey of the theory, construction, and application of psychological tests, involving the study of some of the more commonly used tests of intelligence, achievement, aptitude and personality, use and interpretation of tests in a school setting is emphasized.

# Psychology 579. Psychological Group Tests

3 s.h.

This course surveys current practices and problems in the education of the children with physical and mental handicaps. It is designed for teachers, counselors, supervisors, and administrators who may work with one or more such children or who may wish to prepare for school and community leadership in developing facilities for such children. Prerequisite: A course in child and/or adolescent psychology.

# Psychology 590. Diagnostic Case Studies I

3 s.h.

This is the basic course in learning to use diagnostic material and learning to write up diagnostic findings. Students are involved in the understanding of the unique value of various diagnostic tools and the criteria for selection of each in relation to the present school problem.

### Psychology 591. Diagnostic Case Studies II

3 s.h.

This course continues along the procedures described in Psychology 576A. In addition the students are required to present reports on their diagnostic findings of individual cases. Practice in case reporting to schools, parents, teachers, and agencies is undertaken. Prerequisites: M.A. matriculant or approved certification candidate in psychology.

### Psychology 660. Seminar in Educational Psychology

2 s.h.

This seminar is designed primarily to provide an opportunity for graduate students in psychology to investigate and apply the techniques of research in the psychology field. Prerequisite: Education 503 and matriculation for M.A. degree in psychology or candidate for certification in psychology.

# Psychology 661. Practicum in School Psychology

3 s.h.

Provides closely supervised experience by staff personnel in assessment counseling and consultation procedures. Designed to increase competency in psychological techniques required in school settings. Prerequisite: M.A. matriculant or approved certification candidate in psychology.

### Psychology 662. School Psychologist Externship

3 s.h.

Students are placed in cooperating school districts to serve as apprentice psychologists. A fully certified school psychologist employed in the cooperating district will supervise the student, in addition to the college supervisor will make periodic visits and conduct a series of seminars to be scheduled on campus. Prerequisite: M.A. matriculant or approved certification candidate in psychology.

### SENIOR-GRADUATE COURSES

# Psychology 450. Psychological Foundations of Personality

3 s.h.

This course is concerned with the physical, mental, and cultural factors influencing personality development. Such topics as the nature of personality, mental health and patterns of deviation, and evaluation are considered.

### Psychology 452. Psychology and Education of the Handicapped

3 s.h.

This course is for the preparation of teachers of handicapped children and youth. It orients prospective teachers of regular classes to the special needs of those with handicaps of sensory, motor, intellectual, emotional, and neurological origins. Both the psychological aspects and the practical applications to the classroom are studied. The course includes analysis of case materials.

## Psychology 453. Social Psychology

3 c.h.

This course focuses on the social behavior of the individual and the group. Attention is given to social perception, motivation, and learning; attitudes and values; the development and dynamics of social groups; intergroup tension and prejudice; and psychological approaches to public issues.

# DEPARTMENT OF SCIENCE

Graduate Advisor: DR. JOSEPH F. BECKER

The graduate program in the Science Department is designed to enable the student to pursue further study in the various areas of science for professional or personal reasons. For teachers of science programs are designed to help the teacher with the problem of maintaining professional competence with respect to recent advances in science and science education.

The graduate program of the Science Department is designed to help the science teacher with the problem of maintaining his professional competence with respect to recent advances in the fields of science and science education.

Prior to matriculation in the Science Department for the Master of Arts degree the student should complete a subject matter background of at least twenty-four semester hours of college science. This undergraduate program must show breadth in the three areas of science, biology, chemistry, and physics, plus sufficient depth in at least one area to serve as a base for the graduate program to be taken in the major area.

In cases where there is a weak undergraduate program in the major field, prerequisite courses, not for graduate credit, may be assigned. In general, the assignment of elective hours to the major area would compensate for deficiencies in depth of preparation while prerequisite courses would compensate for deficiencies in breadth.

The student's work program is prepared in cooperation with the science advisor. Any changes in the student's work program are made only with the written approval of the science advisor.

# REQUIREMENTS FOR THE M.A. DEGREE IN SCIENCE

I. Basic Profession Education (see Master's Degree Program Pattern) 6-12 s.h.

II. Specialization

A. The candidate must complete the research requirement by one of the

two procedures listed below:
Sci. 505 Research Seminar in Science 2 s.h.
Grad. 600 Master's Thesis 4 s.h.

- B. The candidate must complete 3 four-semester or three-semester hour courses offered by the Science Department.
- C. The candidate may elect not more than three semester hours from among the following: Bio. 501, Chem. 501, Phy. 501.

### III. Free Electives

6-8 s.h.

Minimum 32 s.h.

IV. Comprehensive Examination

The comprehensive examination will be based upon the research report in Science 505 or the Master's Thesis.

# GRADUATE COURSES IN BIOLOGY

# Biology 501. The Teaching of Biology in Secondary Schools

3 s.h.

This is a seminar and research course designed to give opportunity for study of the best methods and practices being used in the teaching of secondary school biology. Major topics

of discussion are: alms of secondary school biology, course content, functions of textbooks, testing, laboratory exercises and demonstrations, and the collection and use of suitable and available laboratory materials. A study is made of recent research studies in the field of biology teaching. Prerequisite: 16 s.h. in biology.

### Biology 506. Histology and Histological Techniques

4 s.h.

This course includes a study of the microscopic anatomy of living forms in order to bring about the fuller appreciations of their structure and function. The structural characteristics of cells and their specialization according to function are considered as well as the organization of this basic unit into the tissues and organs of the intact form.

The study of histological preparations during the laboratory period gives the student an opportunity to learn the characteristics of each tissue and organ. Basic procedures for the preparation of tissue sections and permanent mounts are covered. Prerequisite: 8 s.h. in biology.

### Biology 512. General Ecology

4 s.h.

This course considers basic ecological principles and concepts. The habitat approach is followed with appropriate field exercises in fresh water, marine and terrestrial ecology. Intra and interspecific relationships are stressed with all living members of the ecosystem. Practical applications of quantitative and qualitative methods will be stressed. Radioecology will be explored. In every case the role of man in relation to his environment will be central. Each student will choose a problem in either plant or animal ecology and do appropriate research in field and library and report on such activity. Prerequisites: General botany, general zoology, plant taxonomy or equivalent, some physical science.

### Biology 516. Evolution

2 s.h.

Theories of biological variation, race, and species formation. The development of some of the major animal and plant groups in time and space, Prerequisite; Zoology and/or botany.

## Biology 520. Plant Physiology

4 s.h.

This course is designed to provide the students with an investigation into the physiology of plants. It will cover in depth those areas of plant growth, development, and reproduction covered generally in the introductory course as well as the new advances in plant physiology. Some of the topics included are water relations of plants, mineral nutrition, physiological significance of soils and soil moisture, photosynthesis, respiration, plant biosynthesis, and dynamics of growth. Prerequisites: Organic chemistry, general botany, or special permission of the instructor.

#### Biology 530. Animal Behavior

4 s.h.

How animals adjust and adapt to stimuli in their external and internal environment, the neuro-muscular and hormonal mechanisms involved, their ontogeny and phylogeny. Prerequisites: A year course in invertebrate and vertebrate zoology and an introductory course in general psychology.

### Biology 531. Comparative Human Anatomy

4 s.h.

A study of man's physical, physiological, and behavioral aspects in the framework, and by the methodological approach of, comparative anatomy. Prerequisite: A year course in general zoology and a course in human anatomy and physiology.

### Biology 540. Parasitology

4 s.h.

This course will consider the structure, life cycles, and ecology of medically important protozoans, helminths, and arthropods. Major emphasis will be placed on the biological relationships between parasite vector and human host. Laboratory work will consist of identification with the use of keys, dissection, examination and preparation of appropriate collections and slides. Prerequisite: General zoology.

# SENIOR-GRADUATE COURSES IN BIOLOGY

# Biology 407. Comparative Vertebrate Embryology

4 s.h.

A broad study of developmental anatomy is made with work on fish, amphibian, reptilian, bird and mammalian embryos. The student makes slides of chick embryos.

The modern experimental approach to embryology is reviewed, and implications of a genetic nature are explored. Prerequisite: 8 s.h. of work in zoology.

Biology 408. Biological Science Demonstration

4 s.h.

The opportunity is given to gain experience in the use of equipment, supplies, and teaching aids so essential to the operation of a successful laboratory and class. Emphasis is also placed upon the collecting and preserving of plant and animal material. The laboratory is devoted to the working out of individual and group experiments and demonstrations. A considerable library of techniques is developed. Prerequisite: 8 s.h. in zoology and 4 s.h. in botany.

# Biology 409. Human Physiology

4 s.h.

A study is made of both cellular and general aspects of human physiology based upon a previous study of mammalian anatomy and histology. Laboratory sessions closely coincide with concepts discussed during lecture sessions. Prerequisite: A course in vertebrate anatomy or Biology 402.

# Biology 410. Comparative Anatomy of the Vertebrata

4 s.h.

Representative members of the phylum chordata are studied by means of dissections and demonstrations. The prochordata are considered briefly. Fundamental principles of taxonomy, anatomy, physiology, and ecology are reviewed and amplified. This course should enrich the background of those interested in vertebrate forms and be of value for those interested in man and his place in the world. Prerequisite: 8 s.h. of work in zoology.

### Biology 411. Microbiology

4 s.h.

General biological phenomena are demonstrated by microbial life by means of laboratory experimentation with bacteria and other microorganisms. Major topics include: history of microbiology, classification, morphology, metabolism, and ecology. Emphasis is placed upon the economic importance and the relationship of microorganisms to human welfare, health, and disease. Specific laboratory techniques and procedures are developed in the course. Prerequisites: General botany, general zoology, and inorganic and organic chemistry.

# Biology 412. Genetics

2 s.h.

The basic facts, principles, and theories of variation and heredity as illustrated in microorganisms, higher plants, animals, and man are considered. Modern cytological, embryological, developmental, and statistical approaches are developed. The newer concepts of the gene, mutation, and gene action are considered. Practical exercises are used to illustrate the principles. Prerequisite: Elementary biology of collegiate grade and/or permission of the instructor.

### Biology 413. Economic Botany

2 s.h.

The consideration of the importance of plants and plant life to the world in general and to man in particular is the principal aim of this course. The economic importance of bacteria, fungi, and other lower plants is considered, as well as that of the seed plants.

### Biology 414. Field Ornithology

2 s.h.

New Jersey is one of the best areas in the East for the study of birds. On the Montclair campus alone, over 130 species have been observed. This course deals primarily with the identification and natural history of birds. A variety of habitats are visited so that one may become acquainted with the habits and requirements of this unusually well-adapted vertebrate type. Migration, methods of attracting and protecting birds, the value of birds, and other problems are also considered. Prerequisite: A year of biology or the equivalent.

### Biology 417, 418. Modern Biology I and II

4 s.h. each

This course meets the needs of in-service teachers who require training in the new approaches to biological knowledge. Cellular biology, biochemistry, evolution and genetics, and the plant and animal community comprise the five general areas to be stressed. Specialists present the data and indicate the implications for man. Visiting lectures and field trips contribute to the experiences of the students. All participants must be in-service biology teachers in a secondary school.

# Biology 422. Field Studies of Flowering Plants

4 s.h.

The emphasis of this course is placed upon the methods of identification of higher plants and the ecological factors affecting the growth and development of these plants. Plants in their winter conditions are considered first. As the season progresses, the emphasis changes from the identification of woody to herbaceous forms. Plant communities of various types are observed, and the factors influencing their development are discussed. Field trips are taken to such typical habitats as the Pine Barrens, and Troy Meadows. Prerequisite: General botany.

# Biology 424. Morphology of Flowering Plants

4 s.h.

This will be an examination of the structure of flowering plants with greatest emphasis being placed upon variation in floral morphology. Adaptations, family relationships, evolutionary development, and some taxonomy will be considered also. Prerequisite: General botany.

# Biology 425. Elementary Plant Physiology

4 s.h.

This introductory course will consider the major physiological processes of the flowering plant. Topics surveyed in this course include growth, metabolism, photosynthesis, respiration, water relations, and mineral nutrition. Prerequisites: General botany and organic chemistry.

# **GRADUATE COURSES IN CHEMISTRY**

# Chemistry 501. The Teaching of Chemistry in Secondary Schools

3 s.h.

A study is made of the objectives, recent trends, methods of presentation, courses of study, lesson planning, instructional aids, and subject matter of high school chemistry. Prerequisite: 16 s.h. in chemistry.

### Chemistry 509. Advanced Inorganic Chemistry

4 s.h.

This course offers opportunity for intensive and systematic study of the elements in the light of the periodic classification. Selected theories and principles of inorganic chemistry and some of their applications are studied in detail. A study is made of types of compounds. Directed use of chemical literature is an important part of this course. Individual experimental work in the laboratory consists chiefly of preparation and purification of inorganic compounds and testing for impurities in the products. Prerequisite: General college chemistry.

### Chemistry 510. Food Inspection and Analysis

4 s.h.

A study is made of the composition of commercial food products, the laws governing purity and marketing of foods, methods of analysis of food. Laboratory work is an extension of chemical and microscopic analysis to provide application of various analytical methods. Methods of extraction; detection of adulterants, preservatives, coloring; estimation of carbohydrates, fats, proteins, minerals, and vitamins are included in the laboratory work of the course. Prerequisites: Organic chemistry and quantitative analysis.

#### Chemistry 511. Advanced Biochemistry

4 s.h.

Selected concepts in biochemistry will be discussed and examined with depth in lecture and in laboratory experimentation. The course will aim to train students in biochemical research and analytical methods. Prerequisites: general biology, general chemistry, organic chemistry, elementary biochemistry.

# Chemistry 515. Advanced Organic Chemistry: Qualitative Organic Analysis

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The primary aim of this course is to acquaint the student with the methods of identification of unknown organic substances. The value, and difference between this and many other laboratory courses, is that as yet no scheme has been devised which reduces the course to the mere following of directions. At every step in the analysis, the student is required to exercise his own judgment. He must rely on his own faculties for observation and originality in planning his work in order to attain a complete and successful characterization of an unknown organic compound. Prerequisite: Organic chemistry.

### Chemistry 521. Theoretical Inorganic Chemistry

3 s.h.

This course is designed for students who had a course in general chemistry at some previous stage of training.

It aims at giving to the student a sound foundation in the principles of inorganic chemical reactions and the properites of inorganic compounds on the basis of structure. In this sense, theories of atomic and molecular structure will be stressed, as well as principles of bond formation. The idea of periodicity will serve as essential theoretical foundation for the entire course.

### Chemistry 540. Chemical Thermodynamics

3 s.h.

This course is given to students who had a course in elementary calculus and general chemistry at some previous stage of training. This course is designed to provide the foundation of a sound theoretical background in Reaction Chemistry and Reaction Kinetics—briefly the "why" of chemical change. It will deal with the applications of Thermodynamic Theories and functions in specific fields in order to highlight their practical significance.

# SENIOR-GRADUATE COURSES IN CHEMISTRY

# Chemistry 407. Advanced Quantitative Analysis

4 s.h.

This course is adapted to the needs of students. The student, after consultation with the instructor, may select analyses from the following: general or special types of oxidation-reduction; gravimetric methods; colormetric titrations; use of organic reagents in analyses; electrometric titrations, conductimetric titrations; spectrographic methods of analysis; electrodeposition of metals; and special methods of analysis. Prerequisites: General college physics and one semester of quantitative analysis, or permission of the instructor.

### Chemistry 408A. Industrial Chemistry, Part I

2 s.h.

The purpose is to enable science teachers to understand the type of chemical industries in the State of New Jersey and the nature of their problems. A survey is made by lectures, reports, and trips to plants of the chemical industries. This section of the course stresses the importance and the characteristics of chemical industry, the various unit operations used by the industry to carry out chemical reactions, the controls used to insure quality, the organization for research, and the type of workers employed. Prerequisites: General and organic chemistry, or permission of the instructor.

# Chemistry 408B. Industrial Chemistry, Part II

2 s.h.

This course is a study of the chemical industries of the metropolitan area utilizing the methods outlined in Chemistry 408A. Also, a study is made of the economics of chemical industry, chemistry, and industry in general, and the effects of chemical discoveries upon living conditions. Prerequisites: General and organic chemistry, or permission of the instructor.

### Chemistry 411. Physical Chemistry, Part I

4 s.h.

This course, the first half of a year's work in physical chemistry, deals with gases, liquids, crystals, physical properties and electrolytes, colloids, thermo-chemistry, and homogeneous and heterogeneous equilibria. Prerequisites: General college chemistry, analytical chemistry, and general college physics.

# Chemistry 412. Physical Chemistry, Part II

4 s.h.

This course deals with electrical conductance, electrolytic equilibrium, electromotive force, electrolysis, polarization, chemical kinetics, photochemical reactions, atomic structure, molecular structure, and radioactivity. Prerequisites: General college chemistry, analytical chemistry, and general college physics.

# Chemistry 413. Atomic Structure and Atomic Energy

2 s.h.

This is a course designed to familiarize the student with a modern conception of the structure of matter and to acquaint him with some significant aspects of atomic energy. Some of the topics: discoveries leading to knowledge of the structure of the atom; isotopes; nuclear fission; nuclear reactions; radio-active isotopes in agricultural, biological, and chemical research; and availability of materials. Prerequisites: General college chemistry and general college physics, or special permission of the instructor.

# Chemistry 414. Introduction to Radiochemistry

2 s.h.

This course is an introduction to the use of radioisotope experiments for the chemistry curriculum. The course consists of lecture and laboratory work which covers such topics as detection instruments, counting techniques, sample preparation, radiochemical separations by co-precipitation, chelation, and ion-exchange techniques. Prerequisites: General college chemistry, general college physics, or permission of the instructor.

### Chemistry 415. Biochemistry

4 s.h.

In this course a study is made of the composition of living organisms, their nutritional requirements, their mechanism for promoting and regulating chemical action, and their metabolism of foods. A laboratory study is made of the components of foods, enzyme action, isolation of proteins, etc., blood and urine analysis. Prerequisite: Organic chemistry.

### GRADUATE COURSES IN PHYSICS

# Physics 501. The Teaching of Physics in Secondary Schools

3 s.h.

A study is made of the objectives, methods, and techniques of presentation, courses of study, lesson planning, instructional aids, and subject matter of high-school physics. Attention is given to the recent trends in developing apparatus and other equipment suitable for teaching the principles of physics. Assignments are made from recent literature on the outcomes of teaching of physics by television and by other visual aids. Prerequisite: 16 s.h. in physics.

# Physics 512. Modern Physics

4 s.h.

This course is a survey of recent experimental research in physics and of the newer theories concerning nuclear physics and electricity. Such topics as atomic spectra, radioactivity, artificial transmutation of the elements, and cosmic rays are discussed. Prerequisites: General college physics, general college chemistry, and a course in electrical measurements. (No credit is given for Phy. 512 if student has taken Phy. 415.)

### Physics 513. Nuclear Radiation

2 s.h.

A study of the nature of radiations is made. Particular attention is given to radiation measurement technique. The course is concluded with a study of health physics as related to radiation dosages and their effects. Some attention is paid to disposal of radioactive wastes, radiation protection, and safety precautions. Prerequisites: General college physics, general college chemistry, and a course in electrical measurements.

### Physics 515. Fields and Waves

4 s.h.

Intended as a terminal course in physics. Portions of all the undergraduate and graduate courses are utilized to present an overall view of the "state of the art." The philosophy and most advanced research in modern day physics are combined to present a unified view of the physicist's present interpretation of the world about us. Prerequisites: Modern Physics. Introduction to Analytical Mechanics, Nuclear Physics, and a year of Integral and Differential Calculus.

# Physics 520. Selected Topics in Physics

4 s.h.

This course is designed to acquaint physical science teachers with recent developments in physics. Topics considered will vary. Illustrative examples are: Mossbauer effect, lasers and masers, nuclear and electron resonance, topics from astro-physics, low and high temperature physics. Laboratory work is not required. Prerequisites: Phy. 101, 102, 402.

# Physics 530. Advanced Mathematical Physics

3 s.h.

This one semester course is a follow up of 83-430, in which we develop further mathematical tools for the solution and description of Physical phenomena. Topics covered include; Boundary value problems; Laplace's, Poisson's Wave, and diffusion equations; Greens function; calculus of variation; Fourier and Laplace transforms. Prerequisites: 83-430

### SENIOR-GRADUATE COURSES IN PHYSICS

### Physics 405. Optics

4 s.h.

Topics included for study in the classroom and laboratory are: the propagation of light; emission and absorption of radiant energy; reflection, refraction, polarization; spectrum analysis; photometric measurements; photoelectric cells; measurement of high temperatures; characteristics of illumination, modern illuminants; and industrial and domestic uses of light. Prerequisites: General college physics and a course in electrical measurements.

### Physics 406. Astronomy

4 s.h.

This course is designed to acquaint the student with the celestial sphere, celestial motions, and the phenomena associated therewith; to make him aware of the principles of astronomy. It consists of a survey of the solar system, practical problems in locating and identifying celestial bodies, a consideration of light and matter, the basic laws of motion, the physical-chemical properties of the sun and stars, stellar scales and maps, the measurement of distance, cosmology of the universe, the history of astronomical concepts, and the regularities, irregularities, and evolution of the solar system. Prerequisites: General college physics and chemistry.

## Physics 409. Basic Electronics

4 s.h.

An introductory course in basic electronic phenomena covering such topics as elementary circuit theory, electron emission, vacuum tube and transistor characteristics, non-linear circuit elements, gaseous discharge, and the use of transistors. Applications of electronics to instrumentation, servo-mechanisms, radio, and television are introduced. Prerequisites: General college physics, and a course in magnetism and electricity.

### Physics 410. Meteorology

4 s.h.

This course develops a fuller appreciation of our atmosphere with emphasis on meteorological applications of physical principles. Consideration is given to weather elements; temperature effects; air currents, air masses, and fronts; the collection, dissemination, and interpretation of weather data; and the general applications of meterology. The student is expected to learn to use meterological instrumentation, and emphasis is placed upon the improvisation of apparatus and equipment. Prerequisite: General college physics.

Physics 411. Photography

4 s.h.

This course consists of laboratory work and field work supplemented by lectures and demonstrations. Emphasis is placed on physical principles in the construction of cameras, projection printers, tanks and filters. Special attention is given to chemical principles in the development of films and paper, toning, intensification, and reduction. Prerequisites: General college physics and general college chemistry or permission of the instructor.

Physics 415. Introduction to Modern Physics

4 s.h.

This course is designed to give the student a general view of the important advances in physics during the past fifty years. In the first part of the course considerable time is spent in the study of electron theory. Some of the topics considered are: the hydrogen atom, optical and X-ray spectra, natural radio-activity, cosmic ray, nuclear fission, new elements and isotopes, and particle accelerators. Some laboratory work is required. Prerequisites: General college physics, general college chemistry, and a course in electrical measurements.

Physics 417. Nuclear Physics

4 s.h.

Nuclear Physics is a one-semester course, including laboratory work, which is designed to provide a foundation in the area of nuclear physics for physical science majors and minors. Some topics considered in the course: static properties of nuclei, detectors, nuclear reactions, forces and models. Prerequisites: Phys. 101, 102, 402.

Physics 420. Heat and Thermodynamics

3 s.h.

This is a one-semester course without laboratory, designed to provide a knowledge of the area of heat and thermodynamics. Some topics considered are: thermodynamics systems, laws of thermodynamics, entropy, kinetic theory, transport processes, statistical thermodynamics.

Physics 431. Theoretical Physics I, Advanced Mechanics

3 s.h.

In this one semester course without laboratory, students will consider topics in mechanics on an advanced level from that discussed in Physics 416. Analytical Mechanics. Some topics considered are: transformations, oscillations, including the anharmonic oscillator, generalized equations of motion. Lagrange's Equations, Hamilton's equations, theory of small oscillations, wave propagation, Green's function. Prerequisites: Analytical Mechanics and Heat and Thermodynamics.

Physics 432. Theoretical Physics II, Advanced Electricity and Magnetism 3 s.h.

In this one semester course without laboratory, the student is given an opportunity to consider the topics in electricity and magnetism on an advanced level from those discussed in Physics 402 Electricity and Magnetism. Some of the topics discussed are: dielectric flux, A.C. networks, nonsinusoidal A.C., transients and pulses, electromagnetic radiation. Prerequisite: Electricity and Magnetism and Calculus.

# SENIOR-GRADUATE COURSES IN EARTH SCIENCE

NOTE: Previous course numbers are enclosed in parentheses. Students are not permitted to enroll in courses they have taken previously under other titles and/or course numbers.

Earth Sci. 406. (Sci. 450) Paleontology

4 s.h.

A study of the classification, relationships, and evolutionary history of fossils. Study is made of the fossils in the relationship to their ecological environment. Prerequisite: Geology and General Biology.

Earth Sci. 430, 431 (Sci. 451, 452) Oceanography and Limnology I, II

2 ch anch

A study of the principles and techniques used in the study of both fresh and salt water bodies. Both physical and biological processes within the water bodies are considered. Field work will be done on local bodies of water. Prerequisite: Physical Geology.

Earth Sci. 440. (Geo. 407) Advanced Cartography

3 s.h.

The emphasis in this course is on modern methods employed in cartographic laboratories, in government, academic institutions, and commerical organizations. The course is designed for students with a background in cartography gained either as a result of experience or through completion of an introductory college cartography course. Prerequisite: Cartography.

# GRADUATE COURSES IN SCIENCE

### Science 505. Research Seminar in Science

2 s.h.

This course is designed to afford opportunity for graduate students in science, supervisors, and science teachers: (1) to investigate research in science education; (2) to organize science experiences and science information with the teaching materials for the public schools. Each member of the group selects a project. This project must be presented to the science faculty and graduate students for evaluation. Prerequisites: Matriculation for M.A. degree in science, concurrent registration Educ. 503, or permission of the instructor.

# SENIOR-GRADUATE COURSES IN SCIENCE

# Science 405. Field and Laboratory Studies in Science

4 s.h.

This integrated course is designed to show the relationship in the geological rock formations, the types of soil, water patterns, plant communities, and animal inhabitants in northern New Jersey, and the effects on human occupations. The field trips are for the purpose of gathering data and materials for intensive work in the laboratory. The experiments are designed to give the student acquaintance with the science of common but possibly unstudied features of the landscape; e.g., soils are reproduced in profile and examined microscopically, physically, and chemically; water from a variety of sources is tested for biological and chemical impurities; the census of plant and animal inhabitants of typical areas is associated with relevant factors in the environment. Discussions precede and follow the field and laboratory work to establish the probable history of the area and to suggest the probable trend, whether advancing or retrogressing, of its development. Stress is placed on the kinds of human control in specific communities which would best serve their progress.

Students are asked to submit an analysis of the geological and biological features of some known community, based on the skills and principles learned. Some other objectives of the course include an understanding of the organization of school museums for learning purposes, the making of ecological maps and the illustration of them with photographs and diagrams, and the techniques of ecological field trips. Two instructors, a chemist and a biologist, collaborate in giving this course. Prerequisite: Proficiency in biology and chemistry.

### Science 409. Senior-High-School Physical Science Demonstrations

& S.II.

This course furnishes teachers of the physical sciences with demonstrations and experiments designed for work in high-school chemistry, physics, and applied physical science courses. A detailed study of demonstrations is made with emphasis on visibility and avoidance of failure. Emphasis is placed on sources of new demonstrations.

### Science 410. Junior-High-School Science Demonstrations

4 s.h.

This course covers the methods of experimental instruction appropriate to grades seven, eight, and nine. A detailed study is made of demonstrations for general science at their levels.

### Science 411. Problems in Field Studies in Science

2 s.h.

In this course each student selects a phase of field science in which he does advanced research under the guidance of the instructor. Plant ecology, bird-life, pond life, fungi, tree diseases, and insect life are a few of the areas from which the student may choose. Prerequisites: Science 412, Field Studies in Science, or its equivalent, plus at least 12 s.h. of biology.

### Science 412. Field Studies in Science: Biological

2 s.h.

Extensive instruction in the identification and natural history of fauna and flora is given in this course. Students examine the ecology of plant and animal communities (terrestrial and aquatic) and relate such communities with man's use of natural resources. The relation of field activities to present school curricula is considered. No previous science courses are required.

### Science 413. Field Studies in Science: Physical

2 s.h.

Emphasis in this course is given to local and New Jersey geology, minerals, soils, and waters, with emphasis on the chemical and physical aspects of soil and water. Field trips are taken through the Kittatinny Mountains and to the Delaware Water Gap.

# Science 414. Conservation of Plants and Animals

2 s.h.

The social, economic, and ecological implications of plant and animal conservation are considered together in this course. Discussion periods are interspersed with field trips to forest and wildlife management areas. Cooperating experts from state and federal agencies bring special contributions in their fields. Visual aids are used extensively.

# Science 415. Conservation of Soil and Water

2 s.h.

The social, economic, and ecological implications of soil and water conservation are considered together in this course. Discussion periods are interspersed with field trips to selected areas. Outside experts bring special contributions in their fields. Visual aids are used extensively.

# Science 418. Three Centuries of Science Progress

2 s.h.

This course includes a study of fundamental world changes that have resulted in the past three hundred years from scientific discoveries. Topics considered are the following: a background of the beliefs and practices of the age; the processes of thought which produced skepticism; the experiments devised to disprove ruling opinions; the new concepts arising from fresh evidence; and the social, economic, and philosophic adjustments following the discoveries.

Stress is given to the nature of scientific inquiry, its cumulative nature, its desire for freedom, and how to judge the probable fruitfulness of a research problem. The role the man of science occupies in the world today is contrasted with his counterpart in earlier centuries. Demonstrations of historical experiments, readings in the original literature, and discussions are employed.

### Science 419. Field Science and Conservation

2 s.h.

In this course students study phases of field science which are related to conservation. The components of soil and water which produce good crops are studied. Students gain an understanding of farm practices by visiting several nearby farms. Forest and wood-lot management, wildlife preservation, mineral resources use, and other important areas in which science influences the conservation of natural resources are investigated.

### Science 420. Water Supply and Conservation Problems

3 s.h.

This course is designed to provide students with an opportunity to do an extensive study of the water supply problems in New Jersey and surrounding states. A study of water tables, rainfall, irrigation, drainage, flooding, watershed management, stream pollution, and soil erosion gives students a background for understanding the problems involved in domestic and industrial use of water. State and regional water conservation projects such as Incodel, Passaic Valley Flood Control, and Stony Brock Water-shed are studied. Teaching materials are supplied, and methods of presenting this material to elementary and secondary pupils are demonstrated and discussed.

### Science 422. Consumer Science

2 s.h.

The purpose and organization of this course are to acquaint the consumer with the aspects of science in everyday life. Basic scientific principles are developed in the process of testing and evaluating consumer products. Field trips are taken to local industries and public utilities to evaluate processes as well as products. A laboratory testing program deals with commercial products from household appliances to foodstuffs and fertilizers. A testing and instructional program is also developed with a local industry. The course is included as a general education offering at the graduate level and is not intended as a course for majors in this department.

# DEPARTMENT OF SOCIAL SCIENCES

Graduate Advisors: Dr. Bertha B. Quintana, Social Sciences
Dr. Richard J. Barker, History

The social sciences comprise a number of disciplines, the boundaries of which are constantly changing and expanding. At the same time, research within the disciplines is becoming more specialized. The necessity for constant study, therefore, presses upon everyone involved in the social sciences whether he is teaching or working in government, industry, or the other helping professions. The Department of Social Sciences provides programs of an advanced character which reflect sound developments in scholarships in the various fields. It also offers advanced courses for teachers who wish to increase their preparedness in specialized secondary school subjects. Finally, it aims to provide for the teacher-in-service an opportunity for keeping informed about changing techniques and problems related to teaching the social studies. Selections from advanced courses lead to the Master's degree in the social sciences, with concentration in a particular field.

# REQUIREMENTS FOR M.A. DEGREE IN SOCIAL SCIENCES

In addition to the general requirements for admission to the graduate program at Montclair, a candidate for the degree of Master of Arts in Social Sciences must present an undergraduate major in social sciences of at least twenty-four semester hours.

- I. General Education (see Master's Degree Program Pattern)
- 6-12 s.h.
- II. Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h.
- III. Specialization

11-20 s.h.

- A. To increase the candidate's competence as a teacher, each student will take a minimum of eleven and a maximum of twenty semester hours in courses offered by the Social Sciences Department. It is recommended that students develop a concentration by electing at least half of their specialization requirement in one of the following areas of study associated with the social studies:
  - 1. American History
  - 2. European History
  - 3. Anthropology
  - 4. Economics
  - 5. Geography
  - 6. Political Science
  - 7. Sociology
  - 8. Non-Western Culture
  - 9. Curriculum

At times two or more of these areas may be combined to make up such a concentration. The balance of the student's program will be made up of electives in other areas and related major fields.

# B. Research Requirement

 One course in each of the areas of concentration will be required of those electing to do their research project in that area. This course will emphasize the research methodology peculiar to its specific fields of inquiry. 2. In addition to the research course (Educ. 503) required of candidates in all departments, those majoring in Social Studies will take Social Studies 603: Seminar in Social Studies Research.

# IV. Comprehensive Examination

All candidates will take part in a final integrative experience consisting of a three hour written examination structured to cover:

- 1. Subject of research project
- 2. Selected area of concentration
- 3. Current trends in social education

Minimum: 32 s.h.

# GRADUATE COURSES IN SOCIAL SCIENCES

# Social Studies 501. Modern Social Studies Instruction and Supervision 2 s.h.

This course is designed to assist teachers, administrators, and supervisors to obtain a comprehensive view of recent curriculum trends in social studies. While primary emphasis will be on development in the secondary school, this aspect will be considered in relation to the total K through 12 program. Consideration will also be given to the problems of administration and supervision as they relate to the pupil, teacher, administrator, and supervisor.

### Social Studies 502. New Materials for the Social Studies 2 s.h.

A study of the sources, selection and evaluation of new materials for the improvements of social studies instruction form the major part of this course. Teachers and administrators concerned with the development of effective social studies programs can become acquainted with the very latest material and equipment available.

### Social Studies 503. The Study of Religion

3 s.h.

This course is designed to introduce teachers, supervisors and administrators to the study of religion. Efforts are directed towards the development of an understanding of the world's major religions as interpreted through history, the various social sciences, literature and the arts.

### Social Studies 601A, 601B, 601C. New Interpretations in History 2 s.h. each

Designed for the teacher with a special interest in history, the course examines important repraisals of the great problems, personalities and periods of either (A) American history, (B) European history, (C) Non-Western history in the light of recent representative examples of historical writing and research.

# Social Studies 602A, 602B. Recent Trends in the Social Sciences 2 s.h.

The teacher with a special interest in the social sciences can utilize this course to examine current trends in the fields of (A) anthropology and sociology, or (B) political science and economics in terms of recent representative examples of professional writing and research.

### Social Studies 603. Social Studies Research Seminar

2 s.h.

This seminar course is designed primarily to provide an opportunity for graduate students in the social sciences to investigate and apply the techniques of research in the social studies field. Prerequisite: Educ. 503.

### Anthropology 531. Living Races

2 s.h.

The physical anthropology of race: human origins; racial revolution; and racial types in the modern world. The facts of race are utilized as the basis for studying race relations in contemporary society, as well as for clarifying misconceptions concerning race and intelligence, race and culture.

# Anthropology 532. Applied Anthropology

2 s.h.

This course considers the selection and application of anthropological data for dealing with problems of contemporary life. Emphasis is placed on anthropological method, early problems of application, and the relevance today of anthropological knowledge in the professions. Prerequisite: Anthropology 401 or 402. Required for Anthropology concentration.

# Anthropology 533. Spanish Culture in the U.S. Today

2 s.h.

This course deals with the cultural heritage of Spanish-speaking America. Utilizing anthropological concepts, problems of adjustment and educational implications are emphasized.

### Anthropology 534. Anthropology and Education

2 s.h.

An advanced seminar dealing with the relationship of anthropology to education. Group work and guided individual research centering on the use of anthropological data in our schools. Prerequisites: 6 credits in anthropology, or by permission of the instructor.

### Economics 540. Developments in Economic Education

2 s.h.

The objective of this course is to provide teachers with insights into the most recent experiments incorporating economic education into the curriculum, K-12. The most useful restructuring of curricula to promote economic understanding will be analyzed. Materials, both written and audio-visual, specifically designed for economic education will be examined. Guest lecturers will be utilized to supplement the experience of the course instructor.

### Economics 541. Foundations of Contemporary Economic Thought

2 s.n.

The objectives of this course are: (1) to study the antecedents of current economic theory; (2) to analyze economics as a cumulative science through examination of the works of the creative economists; (3) to foster an understanding of the uses and limitations of economic theory.

### Economics 542. Economic Stability and Growth

2 s.h.

The objectives of this course are: (1) to study the determinants of stability and growth; (2) to analyze policies available to develop and developing nations that deal with instability and stagnation; (3) to foster an understanding of the issues involved in efforts to avoid insecurity and promote economic growth.

### Economics 543. U.S. in the World Economy

2 s.h.

The objectives of this course are: (1) to study the theory and institutions of American foreign trade; (2) to analyze the alternatives available to the American people; (3) to foster an understanding of the problem of American foreign economic policies.

#### Economics 544. Government and Business

2 s.h.

The objectives of this course are: (1) to study the evolution of governmental influences on the functioning of the American economy; (2) to analyze the causes and consequences of government regulation and control; (3) to foster an understanding of the relationship between economic analysis and public policies.

### History 511. American Colonial History, 1492-1776

2 s.h.

A study of European colonial activity in the New World with particular emphasis on the areas which now constitute the United States. Political, social, economic, and intellectual developments receive attention.

### History 513. The American Revolution and the Early Republic, 1763-1828 2 s.h.

Study and analysis of the causes and events of the Revolution, the establishment and growth of domestic institutions under the Constitution, and the development of foreign policy.

### History 514. The Middle Period in American History, 1828-1876

2 S.II.

A study of the significant events and developments of this period of our history, including attention to Jacksonian democracy, westward expansion, sectionalism, the Civil War, and Reconstruction.

### History 515. America in Transition, 1865-1917

2 s.h.

A study of the forces which contributed to the development of the modern industrialized America, the changing nature of American society, and the reactions to the changes which took place in the period.

# History 516. Recent American History, 1914 to the Present

2 s.h.

Main emphasis will be on the continuing reactions to the problems of an industrialized America, and on America's activities and role as a world power. The period studied is from c. 1914 to the present. The seminar method is used and attention is given to the techniques of historical research and historical writing as it applies to the later period in American history.

# History 523. Modern France

2 s.h.

This course studies the development of modern France from 1789 to the present. Emphasis is placed upon political, social, and economic conditions and trends from the Revolution and Napoleon through the Restoration, Second Empire, Third and Fourth Republics to the establishment in 1958 of the Fifth Republic by Charles de Gaulle.

# History 524. Contemporary Europe

2 s.h.

The period between the wars (1919-39) is reviewed, and analyses are made of the origins of World War II and the peace settlement of 1945-47. Emphasis is then placed upon developments in the postwar period, including the reconstruction of Germany, the changeover in France from the Fourth to the Fifth Republic, Britain's continuing economic crisis, and problems of the states of eastern Europe. Special consideration is given to the movement for political and economic integration of European states.

# History 525. Russia in the Modern World

2 s.h.

Particular attention is devoted to the institutional apparatus of the Soviet system with emphasis given to the special functions performed by such agencies as the press, the schools, and the agricultural collective. The role of the Communist Party and its relation to other political and economic forces within the nation are discussed. In appraising the development of Soviet foreign policy, the emergence of Soviet interests in the Far East, the Middle East, and Africa are considered.

### History 526. Russia Before the Revolution

2 s.h.

An examination is made of the forces which have shaped the course of Russian history. Groups, institutions unique to the Russian environment are analyzed. Among these are the peasants, Tzar, nobility and Greek Orthodox Church. The major social and intellectual movements of the nineteenth century will be discussed.

# History 527. Economic Development of Europe

2 s.h.

An Analysis of European economic development with major attention to the period since about 1750. Studies are made first of the agrarian economy of Medieval Europe, economic expansion during 1500-1800, the Industrial Revolution in Britain. Emphasis is placed on comparing economic growth during the 19th and 20th centuries in Britain, France, Germany, Italy and Russia.

# Political Science 512. Origin and Development of the Constitution, 1619-1835

2 s.h.

This course is an intensive study of the origin and framing of the Constitution of the United States. It aims to search out the roots and influences that determined our basic political institutions. The seminar method is employed and attention is given to the techniques of historical research and writing as it applies to the early period in American history.

### Political Science 521. History of Political Thought

2 s.h.

The major theories of representative political philosophers concerning the nature, functions, organization, and sovereignty of the state are studied in this course. Among those discussed are: Plato, Aristotle, Cicero, Thomas Aquinas, Machiavelli, Luther, Calvin, Bodin, Hobbes, Locke, Spinoza, Montesquieu, Rousseau, Hume, Bentham, J. S. Mill, Burke, Hegel, Marx.

### Political Science 522. Great Britain and the Commonwealth

2 s.h.

A study is made of the origins, membership, and working institutions of the British Commonwealth of Nations. Special attention is given to problems of the Commonwealth since 1945, in the light of Britain's altered position in international affairs and the development in Europe of regional economic organizations.

#### Political Science 551. Constitutional Law

2 s.h.

A study of the development of the Constitution and the Supreme Court of the United States illustrated through reference to court opinions as expressed in selected Supreme Court cases. Areas to be included are: the federal system; human rights; executive, judicial and legislative powers; and interstate commerce.

# Political Science 552. The President and Congress

2 s.h.

The course concentrates attention on the organization, structure and powers of the national executive and legislative branches of government. Special emphasis will be placed on executive-legislative relationships, the nature and functioning of the legislative process, and the respective role of the President and Congress in the formulation of public policy in a modern democracy.

### Political Science 553. The Federal Courts

2 s.h.

This course concentrates attention on the structure of the federal courts and the manner in which they function. Comparisons and contrasts are drawn between the national and state judicial systems and the body of law which they interpret. Special attention is given to the role of the Supreme Court, both as arbiter of federal-state relations and as a restraint on executive and legislative authority. Some of the major decisions of the Supreme Court are examined in tracing the changes in judicial outlook and interpretation.

### Political Science 554. American Political Thought

2 s.h.

This course deals with contemporary trends and theories as they have emerged from social and economic conditions and as they are founded upon the bases laid down by Hamilton, Madison, Washington, Jefferson, Marshall, Calhoun, Webster, Lincoln, and Wilson.

### Sociology 561. Religion in America

2 s.h.

The study of the dynamics of religion in American society. Among the topics considered are contemporary trends in religious thought, religious social action, religious prejudice, and problems of church, state, and school in urban America.

### Sociology 562. Theory and Method in Social Work

2 s.h.

Emphasis in this course is placed on the development of social welfare norms, and on the methodology of contemporary social work. Attention is given to the historical development of social welfare concepts and legislation, and to current trends in the field. Required for Sociology concentration.

### Sociology 563. Social Movements

2 s.h.

A critical analysis of the development of social movements and their effects on social legislation in the Twentieth Century. The dynamics of social movements in complex societies of the world are studied. Prerequisite: 562 or permission of instructor.

### Sociology 564. Social Work and Education

2 s.h.

An advanced seminar dealing with the relationship of social work to professional education. The uses of selected techniques and concepts from the field of social work in contemporary education are emphasized. Students are encouraged to familiarize themselves with services offered by community social agencies to schools and educators. Prerequisites: 6 credits in Sociology, or permission of the instructor.

### Sociology 565. Community Resources and Youth

3 s.h.

This course focuses attention on total resources for youth; for the healthy as well as deviant child. Emphasis is placed on resources in the child's own family and neighborhood, in addition to services provided by public and private agencies. Relevant federal and state legislation is surveyed.

# SENIOR-GRADUATE COURSES IN SOCIAL SCIENCES

# Social Studies 410. The Newspaper in the Classroom

2 s.h.

This course presents new and standard techniques in the use of the newspaper in the English and Social Studies classes in the secondary school.

#### Social Studies 482. Conservation and Rural Economic Life

2 s.h.

A study of one of the basic economic problems in America today, the course is designed to give the student a better understanding of the relationship between rural and urban living. Offered in cooperation with the New Jersey School of Conservation, trips are arranged to farms, dairy cooperatives, farm bureaus, banks, and town meetings.

### Social Studies 491. Studies in American Life—The East

2 s.h.

This course is a regional study of the United States east of the Mississippi River. It covers New England, the Middle Atlantic States, the South, and the Lake States. It deals with the physiographic, economic, historical and cultural patterns of these regions. It emphasizes the regional differences which characterize American unity and diversity. Motion pictures, lectures, maps, mimeographed materials are used.

### Social Studies 492. Studies in American Life—The West

2 s.h.

This course is a regional study of the United States west of the Mississippi River. It covers the Plains States, the Mountain States, the Southwest, and the Pacific Coastal States. It deals with the physiographic, economic, historical and cultural patterns of these regions. It emphasizes the regional differences which characterize American unity and diversity. Motion pictures, lectures, maps, mimeographed materials, and bibliographies are used.

### Social Studies 494. Social Studies and Conservation

2 s.h.

Everyday problems of living as they are related to and affected by the wise use of our natural resources are studied in this course. The student learns about the renewable resources, soil, water, forests, and wildlife, as well as the nonrenewable resources, minerals, oll, and coal. Economic, social, community, national, and individual problems are approached by giving the student first-hand experiences gained through extensive field trips in northern New Jersey.

Anthropology 401. Cultural Anthropology

3 s.n.

An introduction to anthropology as a field of knowledge: the background and development of culture; culture theory; the universals of culture, e.g., religion, art, leisure, education; the relationship of anthropology to science and the humanities. (Not open to social studies majors who have completed Anthropology 200.)

# Anthropology 402. Dynamics of Culture

3 s.h.

Emphasis in this course is placed on the processes involved in cultural development, growth, transmission, perpetuation, and change. Students will be given the opportunity to study the impact today of modern industrial civilization on emerging nations and peoples.

### Anthropology 403. Cultural Diversity

2 s.h.

The study of primitive and folk cultures as seen in contemporary perspective. The purpose of this course is to increase student awareness of the range and variety of cultures in today's world, and to improve understanding of factors which account for cultural variability.

### Anthropology 404. Folklore

3 s.h.

The study of verbal and non-verbal folk traditions in nonliterate and literate societies of the world. Types and functions of folklore, and methodologies employed by folklorists will be stressed.

## Anthropology 405. Psychological Anthropology

3 s.h.

Emphasizing transcultural research, this course focuses on the interrelated nature of culture and the acquisition and modification of human behavior. Cross-cultural studies of the life crises form the basis for analyzing the world view and values of selected societies. Units of study are devoted to the cultural origins of deviant behavior, and to the development of creativity in culture.

### Economics 401. Labor Economics

3 s.h.

The objectives of the course are: (1) to study the evolution of the institutions of the labor market; (2) to analyze the determinants of wage and non-wage aspects of labor-management relations; (3) to foster an understanding of the issues and alternatives in labor economics.

### **Economics 402.** International Economics

3 s.h.

The theory of international trade is examined with the objectives of determining why goods and factors of production move internationally, how they are distributed, what benefits are derived from trade, and what are the effects upon the international economic order of the policies and influences of nations and international agencies.

## Economics 403. Comparative Economic Systems

3 s.h.

The objectives of this course are: (1) to examine the ideological bases of capitalism, fascism, socialism, and communism; (2) to analyze the functioning of major types of economic systems; (3) to develop an understanding of the relationship between economic theory and economic policy.

### Economics 404. Current Problems in Economics and Government

2 s.l

Designed to analyze the relationship of economics to government, the causes and results of governmental activity are discussed in the light of their economic significance and bearing on public welfare through a study of certain classical decisions of the Supreme Court involving those cases relating specifically to economic issues.

# Economics 405. Money and Banking

3 S.II.

Introductory material of money, credit, and monetary standards precedes a more intensive study of the nature and functions of commercial banking. Special attention is given to the Federal Reserve system and its problems in co-ordinating monetary and credit policy with fiscal policy in order to fulfill its current responsibilities.

# Economics 406. Workshop-Seminar in Economic Education

3 s.h.

This course provides an introduction to economic analysis. Emphasis is placed upon techniques of incorporating economic education in both the secondary and elementary school curricula. Guest speakers provide an exposure to a variety of academic and lay professional points of view. Current materials in the field of economic education are evaluated, including written materials for teachers and students, films, filmstrips, models, charts, and diagrams. Teachers will be expected to conduct and evaluate an actual classroom experience in economic education during the course.

### Economics 415. The Economics of Social Problems

3 s.h.

This course surveys the extent, causes and consequences of poverty, inequality and insecurity. An appraisal is made of the following reforms: social insurance, medical care, public housing, rural development. The economics of discrimination and educational opportunity are also examined.

### Geography 408. Political Geography

3 s.h.

This course deals with the geographic conditions influencing the significant changes in the political divisions of the world. Emphasis is placed on geographic factors influencing racial, religious, commercial, and political adjustment among nations.

### Geography 410. Urban Geography

3 s.h.

This course is a study of the growth, morphology, and function of cities. Attention will be given to the complex, dynamic forces which influence spatial patterns and functional changes within urban areas.

### Geography 411. Historical Geography of the United States

3 s.h.

For students of history, geography, and related disciplines to become familiar with major principles of historical geography, it emphasizes the geographic factors pertinent to understanding of American history. Time-place relationships ranging from pre-Columbian America to the present are surveyed and analyzed critically. Attention is paid to source materials, to cartography of specific times, and to geographical lore and thought.

### Geography 412. Geography of Africa

3 s.h.

This course includes a topical and regional study of Africa. Emphasis is placed upon the problems of economic adjustment in the tropics. Soils, vegetation, climate, physiography, natural resources, and other aspects of the physical environment are examined in the light of man's habitation of the continent. Relations between Africa and the rest of the world are analyzed.

### Geography 419. Geography of the Soviet Union

3 s.h.

This course is designed as a regional analysis of the Soviet Union. It examines the physical and human aspects of Soviet geography. Emphasis is placed on economic regions. Relations between the European states and the Soviet Union are discussed, and Russia's place in the world economy is analyzed.

### Geography 421. Population Problems of the World

2 s.h.

An intensive examination of the factors which influence the present-day distributional pattern of the world's people and the political, economic, and social consequences of this development are considered. Particular attention is placed on man-land relationships as related to population problems of contemporary nations.

### Geography 424. Geography of New Jersey

2 s.h.

A detailed topical and regional study of New Jersey, physiography, climate, soils, flora, fauna, agriculture, industry, trade, population, and relation with neighboring states are studied. On the basis of the data examined, an attempt is made to delineate the geographic regions of the state. Emphasis is placed on the relationship between New Jersey's people and New Jersey's earth.

### History 411. Intellectual History of the United States

3 s.h.

Analyzes the development and contributions of the thought of individuals and groups, dominant and minority, and their effect upon the American mind and upon American traditions and practices.

### History 412. The Literature of American History

3 s.h.

The purpose of this course is to familiarize the student with the writings and sources of United States history. Social, economic, political, geographic, and other interpretations are studied and compared. Writings of a group of representative American historians are examined. A general survey and evaluation are made of the primary and secondary sources available for the study of United States history.

# History 413. The West in American History

3 s.h.

A study of the exploration, settlement and development of the regions beyond the Mississippi river. The different types of frontiers are considered. Special attention is focused on the influences of the frontier in American Life.

# History 414. The South in American History

3 s.h.

The course deals with the development of the South from the earliest settlements to the present. Special consideration is given to those aspects of Southern life that have been distinctive and represent a special contribution to American Life.

# History 415. History of Canada

3 s.h.

This is a political, economic, and social survey of Canadian development which traces the growth of British North America towards an autonomous status within the British Commonwealth. Special emphasis is placed on Canada's relationship with the United States.

### History 416. History of Latin America

3 s.h.

This course deals with Latin America from the pre-Columbian era to the end of the wars of independence. Stress is placed upon the geographical background and the development of the Maya, Inca, and Aztec civilizations. After considering the Spanish and Portuguese backgrounds of the Latin-American people, consideration is given to the European cultures established in the New World. In dealing with the wars of independence in Latin-America, comparisons are made with the American Revolution.

# History 417. The Negro in American History

3 s.h.

This course is designed to give students an opportunity to study the role of the Negro within the historical development of the United States. It includes an examination and evaluation of materials currently available for the teaching and study of the subject on the secondary school level.

### History 421. Renaissance and Reformation

3 s.h.

A study of political, economic, social, religious, and general cultural developments in Europe from about 1400 to 1600. Basic interpretations of the Renaissance and Reformation are examined and discussed.

### History 422. Age of Reason

3 s.h.

A study of Seventeenth and Eighteenth Century Europe, with emphasis on the important intellectual currents of the period. Trends and conditions in France and England are emphasized. Selected readings are done in the works of representative figures of the period: Bacon, Descartes, Locke, Rousseau, Montesquieu, Voltaire, Hume, Adam Smith, and others.

### History 423. Russia Since 1917

2 s.h.

An analysis of Russia's relations with China, Iran, Turkey, the European continent, England, and the United States is presented. Marxist world policy, as interpreted by Kautsky, Plekhanov, Jaures, Bukharin, Trotsky, Lenin, Stalin, and others is described. The changing views of Second and Third Internationals, and the organization and methods of the Comintern are discussed.

### History 424. Diplomatic History of Europe

3 s.h.

A study of the diplomatic history of Europe since the Congress of Vienna. Emphasis is placed on the development of diplomatic practice and relations between states during the period 1870 to the present. The diplomatic origins and consequences of World War I and World War II are examined and compared. An analysis is made of Europe's importance in contemporary world diplomacy.

# History 425. Intellectual History of Europe

3 s.h.

A study of important movements in European thought, with emphasis on the Nineteenth and Twentieth Centuries. Selected readings are done in the work of representative figures of the period: Burke, Mill, Hegel, Comte, Marx, Nietzsche, Freud, and others.

# History 427. French Revolution and Napoleon

3 s.h.

An analysis of the background of the French Revolution, its changing course, and cast of characters during 1789-99, and the advent to power and imperial regime of Napoleon Bonaparte, 1799-1814. The expansion of the Revolution and its significance for Europe are examined.

# History 429. Britain in the Twentieth Century

3 s.h.

An analysis of the major problems, economic, social, political, and international, which have confronted Britain in the Twentieth Century. The plans and policies of Conservative and Labour governments since 1919 are examined and compared.

### Political Science 401. Comparative Governments

3 s.h.

This course offers an opportunity to study the political systems of the major world powers. Attention is given to the political institutions of Great Britain, France, and the Soviet Union. In each instance, political institutions are viewed against their economic and social backgrounds. Frequent comparisons are drawn between the American federal government and the foreign government considered in this course.

### Political Science 402. American Party System

3 s.h.

An examination of the structure and functions of the American party system. Included in the study are: party organizations, the political boss, the political machine, the process of voting, election laws, primaries, conventions, platforms, presidential elections, majority rule, the party system, sectional politics, the farm vote, the labor vote, the Negro vote, and the future of party government in the United States.

### Political Science 403. Public Opinion and Pressure Groups

3 s.h.

An investigation into the nature and development of public opinion and pressure groups and their influences on matters of public policy. Attention will be focused on the role of public opinion as it may affect the political processes such as the nomination of candidates and foreign and domestic policy decisions.

### Political Science 404. International Relations

3 s.h.

A study of the modern international system; the forces affecting the interaction of states in their relations with one another; the resultant conflicts of interest and methods to resolve these conflicts. Special attention will be given to nationalism, imperialism, power politics, and conflicts.

### Political Science 405. State and Local Government

2 s.h.

The municipal, county, and state governments of New Jersey furnish the principal subject matter of this course. Federal-state and interstate relations are explored and comparisons are drawn between New Jersey political institutions and those of other states.

#### Political Science 406. International Organization

2 s.h.

The attempts of the international community of states to express itself in a formal world organization are the subject of this course. The agencies which have been established to deal with international, legislative, executive, administrative, and judicial problems are studied, including the international courts of justice, League of Nations, and United Nations.

### Political Science 451. Contemporary Africa

3 s.h.

This course is designed to give the background with which to develop an understanding of the social, political, and economic trends of modern Africa. An effort is made to establish the natural and historical setting for a consideration of colonial issues and policies, as well as decolonization and independence.

### Political Science 452. The Far East

3 s.h.

A study is made of the economic, social, and cultural situation of the Far East, with particular emphasis on the geographic and historical background of India, China, and Japan, Political and social institutions are discussed with special attention to religion and education.

#### Political Science 453. South Asia

3 s.h.

Designed to give an understanding of political, economic, and cultural problems of contemporary South Asia, emphasis is given to post-World War II domestic problems of India, Pakistan, Ceylon, and their international relations with the world community.

# Political Science 454. Modern Latin America

3 s.h.

This course is designed to give an understanding of the economic, social, and political character of contemporary Latin America. The history of these nations from their wars of independence to the present serves as background for the present state of affairs in this region. Students are given an opportunity to read works of Latin-American authors, to hear speakers from that area, and to see recent films.

### Political Science 455. The Middle East

3 s.h.

Starting with a consideration of the factors and forces that shape middle eastern civilization, this course goes on to consider the particular influences operating in the individual countries of the region. The nature of Islam is discussed along with the role of elements making for change, such as technology, the army, and the cold war. Many of the countries of Southwest Asia and North Africa are studied.

### Sociology 401. Modern Sociology

3 s.h.

An introduction to sociology: the scope and aims of sociology; group behavior; social institutions in America; social organization, stratification, and change; the development of social leadership. (Not open to Social Sciences majors who have completed Sociology 200.)

# Sociology 402. Social Pathologies

3 s.h.

This course examines the nature and scope of social problems and deviant behavior in American society. Among the major social problems considered are juvenile delinquency, crime, poverty, prejudice, and our aging population. Public welfare programs concerned with rehabilitation and assistance are stressed throughout the course.

### Sociology 403. Youth and the Community

2 s.h.

A sociological study of youth in contemporary rural, urban, and suburban America. Special consideration is given to social conditions giving rise to problems of maladjustment, anomie, and behavioral disorders in children and adolescents. Youth sub-cultures, and their effect on the school and community, are examined.

### Sociology 404. The Family as an Institution

3 s.h.

This course examines the development of the family unit as an institution within society. Emphasis is placed upon an analysis of the family in contemporary American society. The family is sociologically examined as an institutional form, a social system in process, and as a socializing agency.

# Sociology 405. Urban Sociology

3 s.h.

The study of the urban revolution and historic development of cities; the political and economic functions of cities; industrialization, urbanization and deracination; urbanism as a modern way of life. Urbanism is viewed not only as a new type of society, but as a process that is replacing all former types.

### Sociology 406. Rural Sociology

3 s.h.

During this course, offered at the New Jersey School of Conservation, the student comes face to face with rural life in northern New Jersey. Social processes and problems are considered. Opportunities are provided for students to attend Grange meetings, county fairs, rural dances and parties, and to live for a day or two with a farm family.

### Sociology 407. Race and Ethnic Relations in the United States

3 s.l

This course is an examination of the historic problem of race and ethnic relations in the United States. The principal racial, ethnic, and religious minorities are considered against the social structural factors that underlie inter-group conflicts. In addition, those factors other than discrimination which seriously deter equal group achievement and integration are analyzed.

# Sociology 408. Sociology of Poverty in the United States

3 s.h.

This course is a sociological study of poverty as a major domestic problem. Attention is given to the causes and effects of social deprivation as well as to historical and contemporary efforts at its solution.

### COURSES IN FIELD STUDIES

### Field Studies 401. Continental United States

10 s.h.

This field-study course consists of sixty-two days of directed travel, including all of July and August, and provides an opportunity for gaining an integrated view of our country as a whole. All important geographic and historical features are studied under the instructions of members of the college faculty and local specialists.

### Field Studies 402. Central Eastern Region

2 s.h.

This fifteen-day tour of Pennsylvania, Maryland, Virginia, West Virginia, North Carolina, and Tennessee covers the major points of historic interest associated with the Colonial Period, the American Revolution, and the Civil War, and the geographic features of the coastal plain, the Piedmont, the Great Valley, and the Appalachian Mountains in these states.

### Field Studies 403. New England and French Canada

2 s.h.

This field study course gives an opportunity to study by direct observation the historical and geographical features of New England and the Province of Quebec. This trip, occupying the twelve days immediately following the summer session, is made in a modern chartered motor coach with overnight stops at first-class hotels.

### Field Studies 404. Florida

2 s.h.

This is a field-study course covering the Florida Peninsula including both coasts, the Everglades, and the Lake Region. Among the places visited are ancient St. Augustine; the winter playground at Palm Beach and Miami; the Tamiami Trail through the Everglades; the west coast cities of Sarasota, St. Petersburg, and Tampa, and the Lake Region in the neighborhood of Lake Wales and Orlando. The trip affords opportunity for topographical, historical, and industrial studies. It is usually given during the Easter vacation.

### Field Studies 405. Gulf Coast and Lower Mississippi Valley

2 s.h.

This is a field study covering the Gulf Coast from Mobile to New Orleans. It surveys economic, geographic, and historical aspects of the lower Mississippi Valley. Some places visited are Mobile, Biloxi, New Orleans, Baton Rouge, Natchez, Vicksburg, and Jackson.

# Field Studies 406. Puerto Rico and Virgin Islands

2 s.h.

This is a nine-day field-study course devoted to a survey of our nearest island possessions. It includes an exploration of San Juan and its vicinity, including the University and the rain forest, a two-day trip through the island visiting pineapple, coffee, sugar, textile, and rumproducing areas, churches, homes, and historic places. One day is spent in St. Thomas, largest of the Virgin Islands. The trip to and from the islands is made by air. It is usually offered during the Christmas holidays.

### Field Studies 407. Hawaii

3 s.h.

This is a twenty-day field-study course devoted to a study of our fiftieth state. It covers the islands of Oahu, Hawaii, Maui, and Kauai, and investigates all of the major geographic, historic, economic, and cultural features of the islands. Among the high points are Honolulu, and its environs, including Pearl Harbor; the pineapple, sugar cane, and papaya plantations of Oahu as well as the villages, mountain terrain, architecture, and historic spots; the Kona coast, the city of Hilo, the Kilauea crater and lava flows, the steam vents and sulphur banks, and the tree fern forests; the volcanic phenomena of the islands of Maui, and the canyons, caves, and geysers of Kauai, as well as the rice paddies. There are visits to schools and public buildings and opportunities to meet people of all classes.

### Field Studies 411. Mexico

3 s.h.

This field-study course aims to give a comprehensive view of contemporary Mexican life with its geographic, economic, historic, and cultural setting. Transportation to and from Mexico City is by air and in Mexico by private cars. Places visited include Xochimilco, Acolman, Teotihuacan, Fortin, Puebla, Oaxaca, Guadalajara, Queretaro, Quanajuato, Patzcuaro, San Miguel de Allende, San Jose Purua, Morelia, Toluca, Taxco, and Cuernavaca. The itinerary is carefully planned to include all points of major interest and significance. Special studies may be made in geography, history, art, architecture, archaeology, sociology, economics, and other fields.

#### Field Studies 412. Maritime Provinces of Canada

3 s.h.

This is a twenty-one day field study covering Nova Scotia, Cape Breton Island, New Brunswick, and the Gaspe. The route runs through Vermont and Quebec to the Gaspe. It covers Nova Scotia and Cape Breton Island, including the Cabot Trail, and returns through Maine, New Hampshire, Massachusetts, and Connecticut. Among places visited and topics studied are: Riviere du Loup, picturesque fishing villages along the River and Gulf of St. Lawrence; lumbering and pulpwood operations; Gaspe; Perce with its bird sanctuary; Moncton, New Brunswick, with its tidal bore; St. John, New Brunswick, with its reversing falls; Truno, Digby; Grand Pre; Annapolis Royal; Lunenburg; Halifax, Sydney; Louisburg; Cape Breton Highlands National Fark, the history of the conflicts between the French and the English for this territory, geographical and senic phenomena, and customs and daily life of French-Canadian and English-speaking people of the region are observed.

# Field Studies 413. Three Contrasting Caribbean Cultures: Curacao, Caracas, Trinidad

2 s.h.

This field study course will study the Dutch culture of the island of Curacao, the Spanish culture of Caracas, Venezuela, and the English culture of the island of Trinidad. Stops will also be made in Barbados. Since the western islands of the West Indies can no longer be visited, this, together with the Puerto Rico-Virgin Island tour given at Christmas, provides a unique opportunity to become familiar with the best aspect of the Caribbean area. These two trips complement each other.

### Field Studies A414. Yucatan and Guatemala

This field studies course deals mainly with Toltac, Aztec, and Mayan civilizations of Mexico and Guatemala. A brief visit to Mexico City, covering the Temples of the Sun and Moon and the Guatemalan Shrine, as well as some of the modern aspects of the City, will be followed by a trip to Merida and the Mayan ruins at Chichen-Itza in Yucatan. In Guatemala, Guatemala City and Antigua (the former capital) and the Indian village of Chichi-Castenanga will be visited. This is a opportunity to observe the ancient and contemporary cultures of these regions.

### Field Studies 421. Mediterranean Region and Holy Land

6 s.h.

This is a seven-week field study of the countries adjacent to the Mediterranean Sea, including short stops in Paris, Madrid, and Athens, and more intensive studies of Italy, Turkey, Syria, Lebanon, Israel, Jordan, Egypt, Tunisia, and Morocco. The ancient and modern civilization of these countries will be studied with particular attention to their significance in the contemporary world. Opportunities for special studies in specific areas of geography or history will be available to students.

### Field Studies 422. Soviet Union and Eastern Europe

6 s.h.

This field study provides an exceptional opportunity to study the social, economic, and political systems of the Soviet Union and other communist countries. The group will fly from Copenhagen to Warsaw and Moscow, Leningrad, and Kiev, and then proceed to Alma Ata, Tashkent, Bukhara, Samarkand, Dushanbe, Tbilisi, and Sochi. It will return to Copenhagen via Budapest, Vienna, and Prague.

#### Field Studies 423. The British Isles

3 s.h.

This field study of the British Isles will begin in Ireland and continue through Scotland, Wales and England. It will include cities such as Dublin, Killarny, Cork, Edinburgh, Southampton and London, and the historic and picturesque countryside with its lakes, hills, castles and cathedrals. Opportunities will be offered for the study of the geography, history, literature, economics, and social patterns of these areas.

### Field Studies 431. South Pacific

6 s.h.

This is a seven-week field study course covering the islands of the South Pacific region, Australia, and New Zealand. The purpose of this course is (1) to study the various culture patterns of these islands, (2) to appreciate their significance in recent history and in the future history of the Twentieth Century, (3) to understand the importance of Australia and New Zealand in the modern world. Among the places to be visited are Tahiti, Fiji, New Zealand, Australia, East New Guinea, Papua, New Caledonia, the Isle of Pines, Samoa, Hawaii, and other islands. The geographic, historical, economic, and anthropological patterns of the region are studied. There are visits to farms, mines, schools, public buildings, and native villages, and opportunities to meet people in all sorts and conditions of life.

### Field Studies 432. North Pacific

6 s.h.

This is a seven-week survey of the North Pacific area including Hawaii, Japan, and Alaska; about two and a half weeks are spent in each of the three areas. In Hawaii all four of the leading Hawaiian Islands (Oahu, Hawaii, Maui, and Kauai) are studied. In Japan, studies will be made in Tokyo, Nikko, Kyoto, Nagoya, Hakone, and other areas emphasizing Japan's economic progress, education, home life, scenic and cultural features, and the people of Japan. In Alaska, Anchorage, Nome, Kotzebu, Juneau, and other centers are visited; seeing Eskimo, pioneer, and contemporary life, emphasizing ways of living, crafts, and the economic and social developments of the forty-ninth state.

### Field Studies 451. World Survey

4 s.h.

This is a thirty-five day field-study course planned to give the student a general comprehensive vision of the kind of a world we live in with its varying culture patterns and problems. The itinerary covers the Tokyo and Kamakura area in Japan; Manila and its environs in the Philippines; Calcutta, Delhi, Agra, and Bombay in India; Cairo and Memphis in Egypt; Hong Kong, and the Kowloon Peninsula in southeast China; Bangkok in Thailand; Jerusalem and Damascus in the Holy Land, Baalbeck and Beirut; Istanbul; Athens and Corinth; and Rome.

# THE DEPARTMENT OF SPEECH

Graduate Advisor: DR. L. HOWARD FOX

Speech education in the schools of New Jersey has received increasing recognition in recent years with the conviction that effective oral communication is important to the achievement of self-realization, vocational competency, social effectiveness, and good citizenship. Additional programs of speech are being established to provide developmental and corrective work according to each student's needs. The effectiveness of those programs depends upon the sound and extensive preparation of master teachers who can organize and supervise speech programs and who can offer dynamic leadership in helping to integrate the speech program in the over-all school curriculum.

The graduate program in speech allows qualified students to specialize in one of two areas of speech education: speech arts or speech therapy. It is expected that each graduate student will have at least one of the following goals for his work:

- To be further qualified as a speech therapist in schools and special institutions.
- 2. To complete requirements for certification in the State and in the national professional organization, the American Speech and Hearing Association.
- To increase his skill as a teacher of speech and dramatics in secondary schools.

### SPEECH ARTS

# PREREQUISITES FOR ADMISSION TO THE PROGRAM IN SPEECH ARTS

Students wishing to matriculate in this area of specialization must have completed at least 18 s.h. from among the areas listed below or their equivalent:

Area: Courses:

Fundamentals of Speech: Speech 439A, 439B, 472, 100, 103, 104,

Public Speaking: 20

Oral Interpretation: Speech 449, 462, 470, 204.

Methods in the Teaching of Speech: Speech 106, 448.

Dramatics: Speech 417.

Speech 107, 108, 435, 436, 437A, 437B,

438, 456, 471.

Each student must also be capable of setting a good example of acceptable speech. If his voice and speech patterns are considered to be substandard he will be required to take steps to improve his competency; if the speech problem is severe, he may be refused permission to matriculate.

### REQUIREMENTS FOR THE M.A. DEGREE IN SPEECH ARTS

- I. Basic Professional Education (see Master's Degree Program Pattern) 6-9 s.h.
- II. Specialization Courses 11-20 s.h.

A.	Required	Courses		
	Speech	449	Adva	

Speech		Advanced Public Speaking, or	)	
Speech		Group Discussion, or		
Speech		Argumentation and Debate, or	( 2-3 s.h.	
Speech	565	Advanced Oral Interpretation	1	
Speech	567			
Speech	592	Areas and Techniques of Research	in Speech 3	s.h.
-			Minimum: 32	s.h.

B. Electives: Through advisement based on needs and interests.

Speech 436.	Fundamentals of Stage Lighting	3	s.h.
Speech 438.	Creative Dramatics	2	s.h.
Speech 448.	Choral Speaking	2	s.h.
Speech 457.	Directing the Assembly Program	2	s.h.
Speech 464.	Psychology of Oral Communication	2	s.h.
Speech 471.	Advanced Acting		
Speech 550.	Advanced Study of Voice and Speech Production	3	s.h.
Speech 563.	Scenery Design and Construction		
Speech 564.	History of the Theatre	2	s.h.
Speech 566.	Costume and Make-up for Stage		
Speech 590.	Problems in the Teaching of Speech		
Speech 591.	Organization and Administration of School		
Prince Dy av	Speech Programs	2	s.h.

# III. Free Electives (see Master's Degree Program Pattern)

6-12 s.h.

# IV. Additional Departmental Requirements:

- A. Written Comprehensive Examination. (To be given in the spring of each year.)
- B. Oral demonstration of communication skill.

Prior to the student's final semester, each Master's degree candidate must give evidence of satisfactory platform or performance skill beyond the prerequisite requirement of satisfactory personal speech. The type of performance or demonstration is to be arranged with his advisor prior to the scheduling or any such event; its nature will depend upon the individual experience and goals of each candidate.

Minimum 32 s.h.

### SPEECH THERAPY

# PREREQUISITES FOR ADMISSION TO THE PROGRAM IN SPEECH THERAPY

Students wishing to matriculate for the Master of Arts in Speech Therapy must have completed thirty semester hours in the following courses, or equivalents, and hold or be eligible for a New Jersey State Department of Education certificate in Speech Correction. A minimum of 9 s.h. in Professional Education Courses, with at least one course in each of the following areas:

Principles and Practices of Education Educational Psychology Curriculum A minimum of 18 s.h. in the following courses or their equivalents:

Course:	Undergraduate M.S.C. course(s) meeting this requirement:
Psychology and Education of the Handicapped Phonetics Anatomy and Physiology of the Auditory and Vocal Mechanism Speech Correction Speech Pathology Clinical Practices in Speech	Psych. 452 Speech 104 Speech 208 Speech 209 Speech 410 Speech 461A, 461B
Measurement of Hearing (Audiology) Voice Diction Improvement	Speech 468 Speech 103

Each student must also be capable of setting an example of acceptable speech. If his voice and speech patterns are considered to be substandard, he will be required to take steps to increase his competency; if the speech problem is severe, he may be refused permission to matriculate.

# REQUIREMENTS FOR THE M.A. IN SPEECH THERAPY

KEQ	DIKEMEN	IIS FOR	THE M.A. IN SPEECH THERAPT	
I	Basic Prof	essional i	Education (see Master's Degree Program Pattern)	6-9 s.h.
II.	Specializat	ion	1	11-20 s.h.
	A. Requir	ed Cour	rses:	9 s.h.
			Graduate Seminar in Speech, Hearing and	
			Language Disorders	3 s.h.*
	Speech	535B.	Graduate Practicum in Speech, Hearing and Language Disorders	3 eh *
	Speech	531.		
		592.		
			concurrently may constitute full-time summer see graduate student.	ession re-
	B. Electiv	e Course	es:	2-11 s.h.
			among the following courses will be determined will be based on needs and interests.	through
	Speech Speech Speech	412. 439F. 439G.	Advanced Speech Pathology  Speech Diagnosis  Voice Disorders  Speech Correction  18   B. Teaching Neurologically Impaired  Children  2	3 s.h. 2 s.h. 2 s.h.
	Speech		Stuttering	
	Speech	483A, 4	483B. Methods and Material in Teaching Speech to Language Impaired Children	sh each
	Speech	484.	Cleft Palate and Oral Deformities	
	Speech	533.	Supervision of Speech and Hearing Programs	
	Speech	534.	Advanced Anatomy and Physiology of the Vocal and Auditory Mechanisms	2 - 1
	Speech	522.	Advanced Phonetics	
		532A.	Practicum in Speech Rehabilitation	
	Speech		Psychology of Oral Communication	
	Speech	472.	Voice Science	2 s.h.

Speech 594A,	594B. Independent Study in Speech Rehabilitation
Speech 469. Speech 531. Speech 550.	Auditory Rehabilitation

# III. Free Electives (see Master's Degree Program Pattern)

6-12 s.h.

#### IV. Additional Departmental Requirements:

- A. Written Comprehensive Examination.
- B. Majors in speech pathology must complete a total of 275 hours of supervised direct clinical experience.

Minimum 32 s.h.

#### **GRADUATE COURSES**

#### Speech 522. Advanced Phonetics

2 s.h.

Skill in the use of phonetics is developed further in recognizing and distinguishing acceptable English speech sounds, deviant speech sounds, regional variations in standards of American English, and sounds in foreign languages. Additional study is devoted to the stress, phrasing, and intonation patterns used in speaking English, with some analysis made of these elements in other languages. Prerequisite: Sp. 104 or equivalent.

#### Speech 531. Advanced Audiology

3 s.h.

The purpose of this course is to increase skill in administering tests for determining pure-tone and speech reception threshholds. Emphasis is placed on evaluation and interpretation of test results and on the analysis of client histories. Principles and techniques of hearing aid evaluation, measurement of recruitment, and tests for psychogenic deafness and malingering are studied. Consideration is also given to pre- and post-surgical audiometry, and to the special problems of differential diagnosis in testing children. Prerequisite: 60 clinical hours in speech practicum.

#### Speech 532. Practicum in Speech or Hearing Rehabilitation

2 ch

This course provides advanced students with the opportunities for the practical application of diagnostic and rehabilitative techniques with children and adults who have major speech and language problems. Qualified students participate in specialized laboratory experiences which include planning and supervising speech therapy sessions, providing rehabilitative services to individuals and small groups, interviewing applicants, and administering audiometric tests. Prerequisite: 60 clinical hours in speech practicum.

#### Speech 533. Supervision of Speech and Hearing Programs

2 s.h.

Methods of organization and administration of the speech correction and improvement programs are discussed. Emphasis is placed upon problems of screening, referral, speech-staff training and orientation, in-service courses, parent and community relations, integration with other disciplines, and development of new materials for testing, teaching, and evaluating.

# Speech 534. Advanced Anatomy and Physiology of the Vocal and Auditory Mechanisms

3 s.h.

The basic anatomy of the mechanisms of speech reception and expression is reviewed. Consideration is also given to the integrated functioning of the central nervous system, the automatic nervous system, and the endocrine system. The effects of abnormalities of structure and function of the speech and hearing processes are emphasized. Discussion includes the medical and surgical aspects of rehabilitation, and the hygiene of the ear, nose, and throat. Demonstrations and supervised laboratory dissections are included. Prerequisite: Sp. 208 or equivalent.

## Speech 535A. Graduate Seminar in Speech, Hearing, and Language Disorders

3 s.h.

# Speech 535B. Graduate Practicum in Speech, Hearing, and Language Disorders

3 s.h.

Emphasis is placed upon the diagnostic, therapeutic, and evaluative techniques employed in working with children and adults who have speech disorders of organic etiology. Minimum of 135 clock hours of supervised teaching must be accumulated. Prerequisite: Sp 410 (These courses taken concurrently may constitute full-time summer session requirement for part-time graduate students.

#### Speech 550. Advanced Study of Voice and Speech Production

3 s.h.

The study is made of materials and methods used in the teaching of speech fundamentals on the junior high and senior high school levels. Review and further application of basic subject matter, including English and comparative phonetics, are stressed. Opportunities are provided for practice in improving or further developing personal voice and speech skills, in directing the practice of students with minor speech difficulties, and in phonetically transcribing speech from phonograph records or tape recordings. Some consideration is given to methods of helping students for whom English is not a native language to improve their voice and speech. Prerequisite: Sp. 100, Sp. 103, or equivalent.

#### Speech 563. Scenery Design and Construction

3 s.h.

This course is designed to extend the advanced speech student's knowledge in scenery design and construction techniques. Special emphasis is placed upon stage design as related to the play, the director, and the audience. The course of study includes a survey of the styles of design and the use of the perspective sketch and stage model in planning the stage setting. The application of stage construction techniques is used to demonstrate the necessity of scene design in planning the stage production. Each student is expected to design and plan the construction of scenery for a play appropriate for production in a secondary school.

#### Speech 565. Advanced Oral Interpretation

2 s.h.

This course is designed to provide further study of techniques in interpretation of poetry and prose. Extensive practice is provided in the analysis and presentation of various types of literary material (short story, ballad, narrative, sonnet, etc.) suitable for use in the classroom and for special programs. Prerequisite: Sp. 106 or equivalent.

#### Speech 566. Costume and Make-up for the Stage

3 s.h.

This course provides the advanced student with opportunities to design costumes and make-up for plays of various periods. Consideration is given to the use of materials, colors, and textures in achieving desired effects on the stage. Laboratory work is provided to develop skill in creating a wide variety of make-ups.

#### Speech 567. Seminar in Dramatic Production

6 s.h.

This seminar is for advanced play-production students. It allows each member of the class to pursue projects in keeping with his needs or interests in both the technical and directorial aspects of play production. When possible, supervisory assignments are made in connection with the current program of plays. The seminar meets a minimum of four hours daily for individual project or laboratory activities, for evaluation of specific teaching problems in connection with the current plays, and for group analysis of typical production problems. Prerequisite: enrollment is open only to matriculated graduate students and others with permission.

#### Speech 590. Problems in the Teaching of Speech

3 s.h.

This course is designed to present an analysis and investigation of the problems encountered in the speech classroom, and to survey the textbooks and teaching aids available to the teacher of speech on various grade levels. Consideration is also given to the problems of (1) motivation, (2) methodology, (3) evaluation procedures, and (4) co-curricular speech activities.

# Speech 591. Organization and Administration of the School Speech Program 2 s.h.

The course deals with the problems of organizing and administering a comprehensive speech program in a school system. Consideration is given to curriculum development, teacher-administration relationships, class scheduling, reports and records, in-service training, and integration of the speech program with the total school curriculum.

# Speech 592. Areas and Techniques of Research in Speech and Dramatics

Methods of research appropriate for studies in speech are analyzed. Significant problems in the field are investigated and discussed, and published research projects are evaluated. Special attention is given to the problems of locating and utilizing professional journals and other publications for research. Each student is required to prepare an outline for a research project, to develop a bibliography, to complete the research, and to submit a formal report of the project.

# Speech 594A, 594B. Independent Study in Speech Rehabilitation 1 s.h. each

Students on the graduate level may select an area of speech rehabilitation and with advisement study the literature in the field, observe therapy at special schools and centers, and write reports on findings. Regular conferences with their instructor are arranged for guidance and for evaluation.

## SENIOR-GRADUATE COURSES

The following courses may be applied as prerequisites or equivalencies for admission to the program. In certain instances some are acceptable for graduate credit if the advisor so recommends.

#### Speech 410. Speech Pathology

3 s.h.

This course presents a study of the etiology and pathology of major language and speech disorders which may result from organic, functional, or emotional disturbances: servere stuttering, dysphonia, laryngectomy, cleft palate, cerebral palsy, and aphasia are included. Emphasis is placed upon diagnosis, evaluation, and rehabilitation. Prerequisite: Sp. 439B, or the equivalent.

#### Speech 411. Advanced Speech Pathology

3 s.h.

The purpose of the course is to provide further study and evaluation of modern techniques of speech rehabilitation, and to review research findings in the areas of voice, articulation, rhythm, and symbolization disorders. Consideration is given to the ways in which speech rehabilitation may be integrated with related health services and educational services in schools and special centers. Prerequisite: Sp. 410 or equivalent.

#### Speech 412. Speech Diagnosis

3 s.h.

The purpose of this course is to analyze and evaluate popularly employed techniques of speech diagnosis. Commercially available diagnostic tools, as well as tests that may be designed by the therapist to meet specific needs are discussed. Consideration is also given to the dynamics of interviewing and to the reporting and interpreting of client histories. Specific methodology useful in providing speech rehabilitation services to children and adults with speech and language disorders is evolved. Prerequisite: Sp. 410 or equivalent.

#### Speech 435. Stagecraft

2 s.h.

This workshop course provides advanced training in constructing and painting of scenery and in lighting the stage. A minimum of twelve clock hours in the scene shop is required, in addition to the regular class sessions. Recommended prerequisite: Sp. 108 or the equivalent.

# Speech 436. Fundamentals of Stage Lighting

3 s.h.

The purpose of the course is to analyze the functions of lighting on a stage and to study and use the instruments available to achieve desired effects. Optimum and minimum equipment are studied. The laboratory work is done in the two theaters at the College, which house modern and flexible stage lighting equipment, and in a small auditorium with limited facilities. Students are encouraged to apply the principles of stage lighting to the specific auditorium in which they work. Appropriateness of lighting for different types of stage activities is a fundamental consideration in the course. Prerequisite: Sp. 108 or Sp. 435 or special permission of the instructor,

#### Speech 437A. Dramatic Production Workshop, Acting

2 s.h.

#### Speech 437B. Dramatic Production Workshop: Technical Theater 2

2 s.h.

These courses are designed for those students desiring a comprehensive introductory course in theater production. Students participate as junior members of the summer-theater company. They place special emphasis upon either stagecraft and lighting, or acting. In addition, they participate in the costuming, make-up, and house-management activities. These courses may be used as partial fulfillment of the requirements of the undergraduate speech major or minor, or as a prerequisite to matriculation for the Master's degree in Speech.

#### Speech 438. Creative Dramatics

2 s.h.

The purpose of this course is to study the principles and techniques of creative dramatics as they may be applied in the classroom, theater, and speech therapy program. Major emphasis is placed on materials for dramatization paralleling the mental, physical, and emotional levels of children in grades kindergarten through eight. Application of these techniques with high school students is also considered. The philosophy of creativity is discussed, and attention is given to the integration of the arts with the total educational picture. The course includes a workshop in which members of the class plan and carry out creative activities with children.

#### Speech 439A, B, C, D, E, F, G

The following courses are especially designed for students who wish to fulfill certification requirements to teach children with speech disorders or for graduate students needing to fulfill prerequisites for matriculation for the Master's degree in Speech. Specialized areas in the speech sciences are offered as a workshop with attendance required during all or part of the six-week summer session, depending upon the number of units elected. Speech 439A, 439B, 439C must be taken in sequence. (439D may be taken with 439C.)

# Speech 439A. Phonetics

2 s.h.

An intensive study is made of the manner and place of articulation of sounds heard in American English. Skill is developed in using the International Phonetic Alphabet to transcribe speech both prescriptively and descriptively, from live and recorded voices. Consideration is also given to the intonation and stress patterns of spoken English.

# Speech 439B. Anatomy and Physiology of the Auditory and Vocal Mechanisms

2 s.h.

The work of this course entails a detailed study of the larnyx and ear as they function in the production and reception of speech. Consideration is also given to the physics of sound and to the structure and functioning of the nervous system.

# Speech 439C. Speech Pathology

3 s.h.

The purpose of this course is to present a comprehensive analysis of the major pathologies of articulation, voice, rhythm, and symbolization. The etiology and treatment of severe stuttering, aphasia, cerebral palsy, and the dysphonias are discussed.

#### Speech 439D. Practicum in Speech Correction

1 s.h.

# Speech 439E. Advanced Practicum in Speech Correction

1 s.h.

Students are required to spend forty-five clock hours in the Speech and Hearing Center for each semester-hour of credit in order to gain experience in planning and carrying out programs in therapy with children who have speech and hearing problems. Written observation reports, lesson plans, and progress reports are required. Students also participate in staff conferences and meetings with parents of children enrolled for speech therapy. Practicum hours may also be arranged at local speech centers and hospital units. Prerequisite: A course in speech correction.

# Speech 439F. Voice Disorders

2 s.h.

The purpose of the course is to study selected disorders of voice production. Consideration is given to etiology, pathology, and therapy related to vocal nodules, contact ulcers, paralysis of the vocal cords, and other organic voice problems. Speech rehabilitation techniques for the laryngectomized and for persons with cleft palate conditions are also discussed. Prerequisite: Sp. 439B and C, or consent of the instructor.

#### Speech 439G. Speech Correction

2 s.h.

This course presents an introduction to the area of speech development and correction, with emphasis on voice and speech problems commonly found in children at the nursery, elementary, and secondary-school levels. Consideration is given to the following: (1) subject matter; (2) diagnostic, remedial, and evaluative techniques; (3) testing and practice materials. Demonstrations with children who have faulty patterns of speech or whose speech development has been retarded are provided. Opportunities are provided for students to serve as cadet teachers in the Speech and Hearing Center by generally assisting the therapists and by observing therapy with children who have speech disorders.

#### Speech 440. Theater History: Classical to Elizabethan

2 s.h.

This course is designed to offer the student a comprehensive view of the development of the theater from the classical Greek through the Elizabethan period. Special attention is placed upon plays and playwrights, theater architecture, scenery, costuming, styles of acting and presentation of each period. Course work includes oral reports, lectures, and classroom demonstrations.

#### Speech 441. Theater History: Restoration to Modern

2 s.

This course is designed to extend to the student a comprehensive view of the development of the theater from the Restoration through the modern period. Special attention is placed upon plays and playwrights, theater architecture, scenery, costuming, styles of acting and presentation of the period. Course work includes oral reports, lectures, and classroom demonstrations.

#### Speech 448. Choral Speaking

2 s.h.

In a speaking choir, students acquire skill in interpreting literature suitable for group practice. Consideration is given to various grade levels in teaching. Students prepare a group of selections for their particular interests and purpose.

#### Speech 449. Advanced Public Speaking

2 s.h.

This in an advanced course in the theory and practice of public speaking. It provides opportunities for further training in more complex speech skills, especially in persuasive speaking, and conducting a meeting. Prerequisite: Sp. 204 or the equivalent.

# Speech 456. Play Direction

3 s.h.

This course covers choosing, casting, and directing plays. Scenes are directed for class criticism, and a detailed prompt-book of one play is prepared. Whenever possible, this play is given publicly before an audience. This course complements Sp. 435. Prerequisite: Sp. 437B, or permission of the instructor.

## Speech 457. Directing the Assembly Program

2 s.h.

It is the purpose of this course to prepare students to organize and to conduct assembly programs. Class lectures and discussions cover all phases of the director's responsibilities. Groups conduct research on suitable program materials and share their findings. Each student prepares either a detailed script for an assembly or commencement program or a comprehensive set of notes and materials.

# Speech 461A, 461B. Practicum in Speech Correction, I and II 2 s.h. each

Remedial speech laboratories are maintained at the College as a community service so that students may apply their knowledge of diagnostic, remedial, and evaluative techniques in a professional laboratory experience. Students assist staff members in demonstrations, prepare lesson plans for individual and group speech therapy and teach under supervision. Prerequisites: Phonetics and Speech Correction.

#### Speech 461C. Advanced Practicum in Speech and Hearing

2 s.h.

This course provides further opportunities to apply techniques of speech and hearing rehabilitation under supervision in a laboratory setting. Students are required to: (1) administer audiometric tests and speech diagnostic examinations; (2) work with parents of children who have speech disorders; and (3) assist the beginning student speech therapist in planning and carrying out therapy sessions. Prerequisite: Sp. 461A and B.

#### Speech 462. Group Discussion and Leadership

3 s.h.

The purpose of this course is to study the principles of democratic discussion and the methods employed in guiding and participating in the informal group discussion, and in the panel, symposium, lecture, and debate forum. Parliamentary procedure is considered. Opportunities in the application of principles and methods studied are given through student participation in discussion programs dealing with community and national problems. Attention is also given to the ways in which group discussion may be used as an effective teaching method in the general school curriculum.

#### Speech 464. Psychology of Oral Communication

2 s.h.

This course deals with the development of speech and language in the individual and the problems of communication that lead to confusion of meaning and misunderstanding. Consideration is given to the psychology of persons who are handicapped in speech, hearing, and/or reading, including those with hysterical or psychogenic impairments. The contributions of learning theory and of semantics of communication are studied.

# Speech 466. Speech Development: Improvement and Re-education 2 s.h.

This course is intended for superintendents, principles, and classroom teachers who have little or no background in speech education. Consideration is given to the following topics: (1) speech development; (2) speech difficulties or problems found in the kindergarten, elementary, and secondary schools; (3) acquisition of good voice and speech characteristics; (4) use of techniques and materials in classrooms to motivate good speech patterns; and (5) ways of organizing and integrating speech education within school systems. Demonstrations with individuals and groups are made, and students are expected to prepare a practical project. (Not for Speech majors.)

#### Speech 467. Oral Interpretation for the Teacher

2 s.h.

This course is to help the teacher develop his potentialities in oral reading. Each student is given many opportunities to read aloud and to participate in informal critiques. Assistance is given in compiling a repertory of selections most useful in daily teaching.

#### Speech 468. Measurement of Hearing

3 s.h.

A comprehensive study of the measurement of hearing is made in this course with attention given to the educational implications of partially impaired audition and of deafness. A review of the physics of sound and the anatomy and physiology of the auditory mechanism is included. Emphasis is placed on principles and techniques of screening tests, interpretation of test results, and pure-tone and speech audiometry. Demonstrations and supervised practice are provided. Prerequisite: Sp. 208 or equivalent.

# Speech 469. Auditory Rehabilitation

2 s.h.

The purpose of the course is to study the current theories and practices of teaching speech reading and auditory comprehension to hard-of-hearing children and adults. The educational problems of helping the student to gain proficiency in speech reading as a receptive language process are discussed. Principles of auditory training are studied as a means to help develop the use of residual hearing. Emphasis is placed on the ways in which speech reading and auditory comprehension supplement each other in the rehabilitation of the hard-of-hearing individual. Practical consideration is given to the preparation of lessons for the acoustically impaired at all grade levels.

## Speech 470. Argumentation and Debate

3 s.h.

A study is made in this course of the principles of argumentation including characteristics of propositions, definition of terms, logical organization, evidence, and oral argumentation techniques. Consideration is also given to the organization and coaching of school forensic programs. Practice and experience are afforded the student in argumentation and debate on current, significant issues.

#### Speech 471. Advanced Acting

2 s.h.

Through three areas of activitiy this course aims to broaden the student's appreciation of the art of acting and to increase his own acting skill. This is accomplished through individual study of established actors and schools of acting, through critiques of acting as observed by attending professional productions, and mainly through preparation of solo and group acting exercises, both original and from established dramatic literature. As far as possible, attention is paid to the student's future personal use of the material and exercises of the course. Prerequisite: Sp. 105B. or its equivalent, with a grade of "B" or better, or the permission of the instructor.

#### Speech 472. Voice Science

2 s.h.

The purposes are: (1) to have the student make a careful analysis of his own vocal structure and vocal habits as applied to the basic aspects and factors of sound; (2) to analyze ineffective and effective voice characteristics of pitch, volume, and quality and work for the elimination of unpleasant elements through intensive practice; and (3) to acquire and develop control of a pleasing speaking voice in speaking and oral reading situations. Prerequisite: Speech 100 or 103.

#### Speech 473. Speech and Hearing Programs in the Schools

2 s.h.

This course is designed to acquaint prospective school speech therapists with the organization and administration of various kinds of speech and hearing programs in the schools. Consideration is given to aspects of testing, scheduling, grouping, and record keeping. The role of the speech and hearing therapist in relation to administrators, teachers, specialists in related areas, and parents is also studied. Planning for in-service workshops and parent-study groups is included.

## Speech 481A, 481B. Teaching Neurologically Impaired Children 2 s.h. each

A. Theory and methodology. Study of the causes and effects of neurological impairment in school age children. Emphasis will be on methods effective in helping children whose perceptual dysfunctioning interferes with development of communication and of learning. Demonstrations with neurologically impaired children will serve as the basis for study and discussion.

B. Demonstration and practice teaching. Student teaching, under supervision, of groups of children who have neurological impairments. Discussion and evaluation will follow each lesson. Parents of the children will take part in the conferences with the teachers. (Credit for whole course dependent upon completion of part B.)

#### Speech 482. Stuttering

2 s.n.

Principles and methods of speech therapy with children who stutter are studied. Methods of evaluation, specific techniques of speech therapy, and principles coordinating speech therapy with home and with school life will be the focus of this practical course. Demonstrations with children who stutter will serve as the basis for study and discussion.

# Speech 483A, 483B. Methods and Materials in Teaching Speech to Language Impaired Children—I and II 2 s.h. each

- I. Nature and needs in helping language impaired children to develop concepts for expressing thoughts and needs. Special emphasis on mentally retarded children. Demonstrations with trainable and educable children, aphasic children, and schizophrenic children.
- II. Methods, materials, and programs for teaching children with language impairments in a supervised and evaluated clinical practicum on campus.

# Speech 484. Cleft Palate and Oral Deformities

2 s.h.

Study of etiology and characteristics of cleft palate and oral deformities or malfunctions in children. Emphasis on speech therapy and surgical repair procedures. Unit on tongue thrust therapy is also included.

# Workshop in Speech Correction (not for graduate credit)

The following courses are especially designed for students who wish to fulfill certification requirements to teach children with speech disorders or for graduate students needing to fulfill prerequisites for matriculation for the Master's degree in Speech. Specialized areas in the speech sciences are offered as a workshop with attendance required during all or part of the six-week summer session, depending upon the number of units elected. Speech 439A, 439B, 439C must be taken in sequence. (439D may be taken with 439C.)

## Speech 439A. Phonetics

2 s.h.

An intensive study is made of the manner and place of articulation of sounds heard in American English. Skill is developed in using the International Phonetic Alphabet to transcribe speech both prescriptively and descriptively, from live and recorded voices. Consideration is also given to the intonation and stress patterns of spoken English.

# Speech 439B. Anatomy and Physiology of the Auditory and Vocal Mechanisms

3 s.h.

The work of this course entails a detailed study of the larnyx and ear as they function in the production and reception of speech. Consideration is also given to the physics of sound and to the structure and functioning of the nervous system.

#### Speech 439C. Speech Pathology

2 s.h.

The purpose of this course is to present a comprehensive analysis of the major pathologies of articulation, voice, rhythm, and symbolization. The etiology and treatment of severe stuttering, aphasia, cerebral palsy, and the dysphonias are discussed.

#### Speech 439D. Practicum in Speech Correction

1 s.h.

#### Speech 439E. Advanced Practicum in Speech Correction

Students are required to spend forty-five clock hours in the Speech and Hearing Center for each semester-hour of credit in order to gain experience in planning and carrying out programs in therapy with children who have speech and hearing problems. Written observation reports, lesson plans, and progress reports are required. Students also participate in staff conferences and meetings with parents of children enrolled for speech therapy. Practicum hours may also be arranged at local speech centers and hospital units. Prerequisite: A course in speech correction.

#### Speech 439F. Voice Disorders

2 s.h.

The purpose of the course is to study selected disorders of voice production. Consideration is given to etiology, pathology, and therapy related to vocal nodules, contact ulcers, paralysis of the vocal cords, and other organic voice problems. Speech rehabilitation techniques for the laryngectomized and for persons with cleft palate conditions are also discussed. Prerequisite: Sp. 439B and C, or consent of the instructor.

#### Speech 439G. Speech Correction

2 s.h.

This course presents an introduction to the area of speech development and correction, with emphasis on voice and speech problems commonly found in children at the nursery, elementary, and secondary-school levels. Consideration is given to the following: (1) subject matter; (2) diagnostic, remedial, and evaluative techniques; (3) testing and practice materials. Demonstrations with children who have faulty patterns of speech or whose speech development has been retarded are provided. Opportunities are provided for students to serve as cadet teachers in the Speech and Hearing Center by generally assisting the therapists and by observing therapy with children who have speech disorders.

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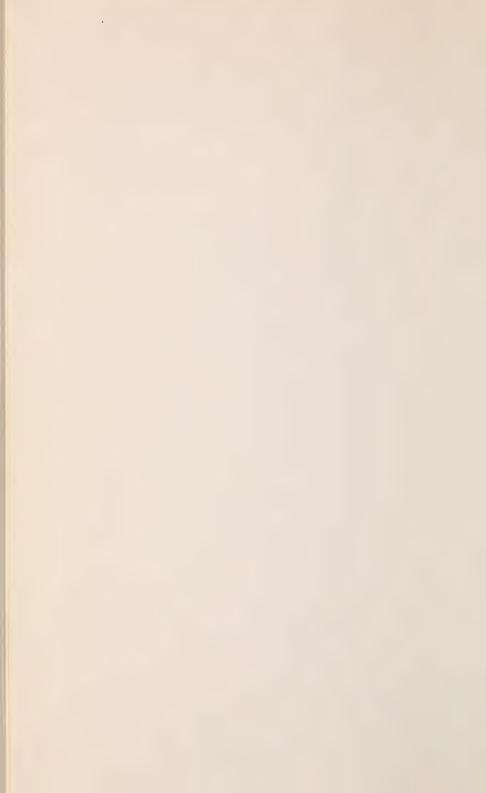


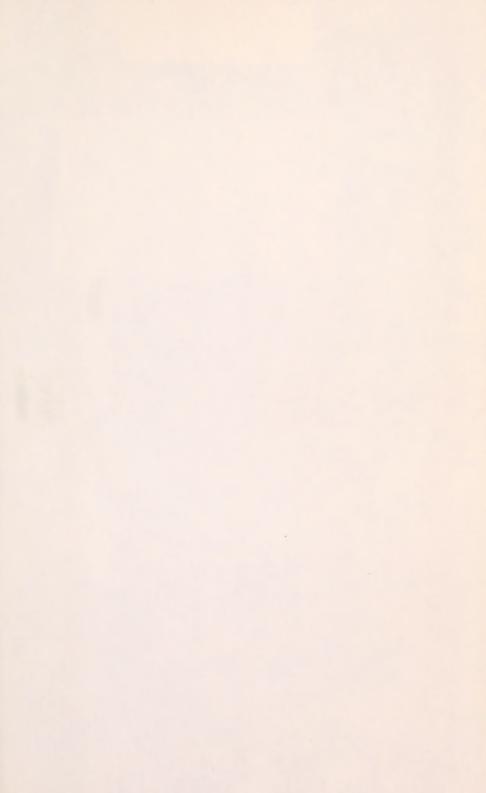
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